Devastating Effects of Terrorism on Human Rights Protection in Nigeria.

By

Damina Joshua John

School of Law

Kampala International University

Kampala Uganda

john.damina@kiu.ac.ng /+2348036292522

Prof. Alphonsus Okoh Alubo

Faculty of Law,

University of Jos, Nigeria.

alphonsusokohalubo@gmail.com /+2348037000848

And

Dr. Arome Moses Okwori

Faculty of Law,

University of Jos. Nigeria

okworia@unijos.edu.ng /+234 803 597 6292

Abstract

Terrorism remains one of the most pressing security threats in Nigeria, posing significant challenges to national stability, economic growth, and social cohesion. Many citizens have being killed and their properties destroyed on daily bases. Despite this, Nigerian governments have tried to be on top of the situation, yet the problem still continues. From the look of things, government seems to be overwhelmed in protecting the lives and properties of Nigerians from extremism. This article analysed the

challenges been faced amidst the increasing rate of terrorist activities in Nigeria by discussing its causes and consequences as well as the prospects. The research adopted doctrinal method using descriptive and analytical based on primary and secondary materials. The paper strongly argued that, to effectively counter terrorism, the government needs to reorganize and strengthen its security, intelligence gathering style to restore public confidence by dealing with the underlying widespread discontent through good governance and especially respect for the rule of law in the country. It was concluded and recommended that, adoption of conflict prevention approach which focuses on the likely causes of conflict in order to promote prompt measures that can de-escalate conflicts using kinetic and non-kinetic methods to restore peace.

Keywords: Devastating, effects, Terrorism, Human Rights, Protection in Nigeria

Introduction

Terrorism has emerged as a significant threat to human rights in Nigeria, undermining the fundamental freedoms and security of individuals and communities. Over the years, groups such as Boko Haram, the Islamic State West Africa Province (ISWAP), and other violent extremist organizations have carried out attacks that have resulted in widespread human rights violations, including loss of life, displacement, and destruction of livelihoods. The impact of terrorism in Nigeria extends beyond physical violence, affecting civil, political, economic, and social rights. The rights to life, freedom of movement, education, and access to healthcare have been severely compromised, particularly in conflict-affected regions like the Northeast, Northwest and North central. Women and children are disproportionately affected, often subjected to abductions, forced recruitment, and gender-based violence.

In response, the Nigerian government has implemented counterterrorism measures, including military operations and legal frameworks. However, these measures have sometimes led to human rights abuses, such as extrajudicial killings, arbitrary detentions, and restrictions on freedom of expression. Balancing national security with the protection of human rights remains a critical challenge. This paper explores the multifaceted challenges that terrorism poses to human rights in Nigeria, highlighting the key areas of concern, government responses, and recommendations for more effective and rights-based approach to counterterrorism.

Legal framework

The International Covenant on Civil and Political Rights (ICCPR) is a key international treaty adopted by the United Nations General Assembly (UNGA) in 1966, it legally binds states to respect and protect civil and political rights of individuals without discrimination. These rights were subsequently incorporated into Constitutions of

States. The Constitution of Nigeria provides for the protection of human life and properties, primarily in Chapter IV (Fundamental Rights) of the 1999 Constitution (as amended).

Federal Republic of Nigeria, on April 27, 2022. Signed Terrorism (Prevention and Prohibition) Act into law. The Act is designated as Act No. 15 of 2022 and repeals the 2011 Act (repealed Act) and its amendment of 2013. The Act features 16 parts and runs into 100 sections with three Schedules.

In order words, the TPPA, 2022's objective is to effectively implement global laws pertaining to the funding, safeguarding, and repression of terrorism. It does this by repealing the No. 10, 2011 Terrorism (Prevention) Act, as revised in 2013, as by enacting measures in order to identify, stop, combat, and outlaw acts of terrorism. Additionally, it creates a structure for the institutions—such as liaison with the Nigeria Sanctions Committee, execution, execution for the Act's clauses in which TPPA retained some of the sections in the repealed Act and also made other additions which are germane to the counter-terrorism efforts of the Nigerian government.

Title of TPPA

The title of the Act is unique as it repealed the Act as titled "Terrorism (Prevention) Act which has been criticized as being inadequate to describe an Act which should include provisions for both prohibition and prevention of acts or omission constituting Acts of terrorism. Specifically, the study argues that the Act cannot be aimed at prevention alone but also at prohibition of terrorism as the offences created by the Act are grounded in the prohibition of such acts or omission constituting terrorism.

Objectives of TPPA

The objectives of the Act are provided for under the Act:

a. The efficient, cohesive, and all-encompassing legal, regulatory, and institutional structure for identifying, stopping, outlawing, prosecuting, and penalizing terrorist deeds, funding terrorists, facilitating spread for WMDs; weapons of mass destruction within Nigeria;

b. procedures in carrying out monetary sanctions resulting to resolutions on counter proliferation in line with UN Charter Article 41;

c. mechanisms for the execution and upholding of international and regional

counterterrorism conventions, as well as agreements for the fight against terrorists, terrorism funding, with other associated offenses, under Nigerian law;

- d. processes for designating an individual or organization as a terrorist, terrorist organization, or financier of terrorism;
- e. multinational jurisdiction of the judiciary over terrorist actions;
- f. Actions to help Nigeria combat the funding of terrorism, such as procedures for reporting suspected instances of money or other forms of support for terrorist organizations
- g procedures for detaining, freezing, searching, seizing, and forfeiting property linked to terrorism; and
- h. Payment to victims of terrorist attacks.

Section 1 is novel in that the repealed Act lacked a detailed and clearly spelt-out objective(s). While the repealed Act featured about three aims of the Act, the TPPA, 2022 presents eight objectives. This is a welcome development as the spelling out of the objectives of an Act showcases its road map and assists in the interpretation of its provisions.

Prohibition of Terrorism

The Act lays out the guidelines for outlawing terrorist offenses. It forbids any intentional direct or indirect actions done by a person, organization, or both in the course of carrying out, threatening to carry out, or attempting to carry out the prohibited act. Likewise, it forbids failing to take action to stop terrorism, as well as accessory actions both before and after the occurrence, facilitation and assistance, incitement, and recruitment for terrorist activities.

The Act defines a "acts of terrorism" as a deliberate action performed with the intent that advancing any political, religious, racial, or ethnic ideology. Such an act may cause harm, damage, coercion, intimidation, influence, destabilization, or destruction of any nation's political, legal, or economic structures, as well as its citizens, government, or international organizations. Any breach of a convention or treaty of the United Nations, provided that Nigeria has accepted the agreement in line with its Constitution, may also be considered an act of terrorism.

Attacks that cause great physical injury or death, abductions and the destructions of governments buildings, public property, or infrastructure, the seizure of aircraft, the production and employing nuclear power, biological, chemical, and radiological weapons of mass destruction (BCRN), the endangerment of people's lives in public property, trains, aircraft, or ships, the interference with emergency systems (civil, military, police, or medical), the crime includes, among other things, the failure to any

linked computer system or required in order to run public amenities, as well as the replication and broadcast of information meant to provoke violence or fear.

In fact, section 2 of the TPPA 2022 is very clear and, albeit being more explicit than its deleted Act counterpart, it still seems ambiguous. It is sufficient to say that, section 2(4) excludes from the definition of this definition any acts that cause a disruption of service but are carried out in support of a protest, demonstration, or work stoppage, as long as the behavior is not meant to inflict the harms mentioned in clauses (3) (b), (c), (d), (e), or (f). Even while the conduct's definition of acts of terrorism is quite broad, it does not include any provisions that would criminalize the conduct of Boko Haram insurgents exploiting women as sexual objects or comfort women in captivity, a technique known as "sexual terrorism." We note that Despite the fact that the Act expressly states that "kidnapping is a terrorist attack," Congress didn't anticipate scenario in which a terrorist will abduct individuals only for the purpose of sexual exploitation, slavery, or maltreatment. The Act did not account for terrorists' crimes of rape against women because of this lack of foresight.

There have been several allegations of Young girls and women who have been exposed to sexual violence by both terrorists and by state agents (of the security law enforcement agencies) who are charged with the duty of sheltering them at various IDP Camps. Further, the spate of abduction of girls who were then forced to marry Boko Haram members, makes it imperative that this lacuna in the law is filled to include sexual terrorism as it is trite that an offence is not constituted under Nigerian law save that it is contained in a written law.

The Coordinating Bodies

Another critique which has hitherto been levied against the repealed Act is the lack of demarcated or clearly defined roles for each of Security as well as law enforcement forces. Empowered by the legislation; in order to carry out the counter terrorism processes. Multi-agency approach without designated roles for each agency is fraught with the danger of 'too many cooks spoiling the broth' as evidenced by past and continuing inter agency rivalry which further threatens effective implementation of counter-terrorism efforts.

• art II of the TPPA 2022, titled National Coordination and Enforcement, provides a fresh breath in that regard. The attorney general is in charge of bolstering and improving the current legislative framework on countering terrorism and terrorism funding, as well as dispersion or sponsorship of the dissemination of weaponry of mass destruction. On the other hand, the duty of developing policies for effectively implementing coordinated counter-terrorist and financing of terrorism operations is vested on the Office of National Security Advisor, who will also execute any other tasks as the President may see essential.

Another novel provision is that which designated Security and law enforcement agencies are in charge of investigating and obtaining intelligence on all violations.

Additionally, the Act promotes collaboration and collaboration between the numerous organizational bodies established. Although these clauses are not guarantees which the competition would in the long run, this is anticipated that they will be kept to a minimal to enhance Nigeria's counterterrorism endeavors.

The National Counter terrorism Center

The Act established National Counter Terrorism Center (NCTC). The above establishment of the NCTC is novel. According to The Act, The NCTC is entrusted coordinating counterterrorism policies, plans, tactics, and assistance for implementation of the tasks of the National Security Advisor. Among other purposes, NCTC shall create a branch for Joint Terrorism and Analysis which will serve an amalgam center in charge of intelligence, evaluation, and research on terrorism assistance for security as well as law enforcement organizations. This is a laudable objective as it ought to serve as a melting pot for all ideas from the law enforcement agencies to present their ideas and harmonise them. This factor should go a long way in galvanising unity among the hitherto warring agencies.

Nigerian Sanctions Committee

The Attorney General for the Federation is tasked with establishing Nigeria Sanctions Committee to inter alba formulate and offer broader regulations on designations created under the Act and provide guidance on how to effectively implement resolutions from the United Nations security council in reference to the funding terrorism and proliferation, as well as related measures of the west between the Economic Communities for African States in the African Union. This is another unique provision of the Act which should go a long way in achieving a major objective of the Act by ensuring effective combat combating the funding of terrorism, including ways to report alleged instances of monetary or other forms of assistance to terrorist organizations in Nigeria

Victims Trust Fund and the Special Victims Trust Fund Committee

The National Counter Terrorism Strategy, (NACTEST), 2016 provided for compensation for victims of counter terrorism, without a legal framework and as such making compensation for victims of terrorism not legally enforceable as it derives no authority from the Act. The 2022 Act's objective for compensation for victims of terrorist attacks and the establishment for the Trust Fund Committee is therefore novel and gives an authoritative legal backing to NACTEST on this issue.

These actions have had a negative impact on Nigeria, resulting in both severe humanitarian crises and insecurity issues. Even after the implementation of Terrorism Prevention and Prohibition Act 2022 and Laws before it, which despite the fact that laws were put in place to investigate, punish, and eventually stop Nigerian people from engaging in acts of terrorism, many of them continue to do so. This work proposes to execute how effective are the Nigeria legal frameworks put in place for combating

terrorism and protection of civilians in Nigeria. For this reason, the research gave definition of terrorism, human right, types and causes of terrorism, history of Boko-Haram and their nefarious activities, government reaction to human rights violations and terrorism. Solutions on how to end terrorism in Nigeria is proffered.

Entire democracies, terrorism targets human rights and the rule of law. This goes after the fundamental ideas of international and other national instruments, including the United Nations Charter, Especially Chapter four: People's rights; the legal system; regulations pertaining to conflicts of arms & safeguarding civilians; tolerance between peoples and nations; and amicable dispute resolution settlement. Terrorism has a direct influence on numerous human rights, including the rights to life, freedom, as well as well-being. Acts of terrorism has the capacity to overthrow governments, erode civic society undermine security and tranquillity impede social and economic advancement, and disproportionately harm particular communities. The practice of fundamental human rights is directly impacted by each of these. The Security Council, the General Assembly, a number of UN agencies have recognized the negative impacts of terrorism on security and human rights, including the former Commission on Human Rights and the recently formed Human Rights Council. Member nations have declared unequivocally that terrorism:

Endangers or kills innocent people, puts people's freedom from fear in jeopardy, threatens human dignity and security worldwide, challenges basic freedoms, and seeks to eradicate human rights; Strives to destroy the democratic foundations of society, threatens the evolution of the legal system, threatens pluralistic civic organization, and topples legally established governments:

Possesses connections to a number of grave offenses, including attacks, kidnappings, robberies, murder, fraud, and taking hostages; has ties to drug trafficking, money laundering, trafficking in weapons, and illicit transfers of nuclear, chemical, and biological materials;

Has a negative impact on states' efforts to grow socially and economically, jeopardizes friendly relations among states, and taints relations of cooperation amongst states, particularly relations of growth; as well as

Poses a major threat to global peace and security, imperils state sovereignty and territorial integrity, and is incompatible with the principles and objectives of the UN. Therefore, it needs to be inhibited to keep these essential components intact. Human rights laws, both global and local, clearly demonstrate that states are obligated to protect their citizens who reside within their borders against terrorist attacks. This stems from the broad duty of States to protect their subjects against outside influences that could impede their exercise of human rights. More specifically, it is agreed that this obligation is a part of the States' obligations to ensure that the rights to life and security are respected.

It has been said that the right to life is "the supreme right" thus each other's rights

would be meaningless without its effective guarantee. Treaties on human rights, both regional and international, including the International Covenant on Civil and Political Rights, safeguard it. Therefore, even in times of public emergency, the State is not permitted to infringe upon anyone's right to life inside its borders. Instead, the State is obligated to protect this freedom. States are required under the protection of the right to life to take all reasonable precautions to ensure the safety of individuals within their jurisdiction.

States must, within other duties, set up effective criminal law enforcement and justice systems. These systems must include measures that avoid future infractions, guarantee that those suspected of committing crimes are brought to justice and provide victims with sufficient compensation, and look into infractions when they occur. Human rights law, both international and regional, has also recognized that, in certain situations, States must act pro-actively to protect an individual or individuals whose lives are thought to be in danger from the unlawful actions of others, especially terrorists. It's also crucial to stress that, in cases where there is a known or suspected threat; States have an obligation to safeguard the personal safety of individuals under their jurisdiction. Naturally, this includes the threat of terrorism. State implementation of successful counterterrorism measures is both required and right to uphold their duties under human rights legislation to safeguard the lives and security of people under their authority, to stop and discourage future acts of terrorism, and to bring legal action against those accountable for committing such crimes. The defense and advancement of human rights are also seriously threatened by the fight against terrorism. State obligations in accordance with international law, specifically those pertaining to international human rights, refugee, and humanitarian law, must be adhered to in all counterterrorism actions as a component of states' obligations to safeguard people within their control.

A body of regulations IHL, International Humanitarian Law, strives to decrease the negative consequences of war on humanity purposes. IHL restricts the weapons and tactics of war while defending those who aren't or aren't engaged in hostilities. The laws of war and armed conflict are other names for IHL. All of the world's states have ratified the 1949 Geneva Conventions, which constitute much of the international humanitarian law. This convention was seen inadequate to meet up the reality in the battle field, so the Conventions has to be enhanced and enhanced by two more accords: the Added Protocols, Concerning the defense of hostilities victims plus its Additional Protocol of 2005, Concerning the introduction of a second unique emblem. These Conventions set particular rules to safeguard fighters, or member in the militia, as well as civilians, medical personnel, military clergy, and soldiers in civilian support roles who might be hurt, unwell, or drowned.

The Fourth Geneva Convention Relating to the Protection of Civilians provides for civilians occupying and living in areas of armed conflict territories to be protected. Particular clauses comprise Human rights include protection from prejudice stemming from ethnicity, nationality, faith, or political beliefs and against murder assault, and further inhumane measures. Hospital and safe zones may be helpful for the sick,

injured, and old as well as for kids below 15, expectant women, and moms of young children under seven constructed. Hospitals run by civilians and their employees must be safeguarded. The care of orphaned or family-separated youngsters is covered under this convention. Along with Red Cross and Red Crescent national organizations, the ICRC's Central Tracing and Protection Agency is also authorized to disseminate family news and facilitate family reunifications. Respect is owed to civilians' safety, honor, family rights, religious beliefs, etiquette, and customs. It is forbidden to plunder, retaliate, destroy property carelessly, or take hostages.

Individuals don't have to be deported or subjected to a collective penalty. An occupying force cannot compel civilians to do military-related tasks. The population's needs for food and medical supplies are met by occupying powers, which also include maintaining public health and medical facilities. Passage should be permitted for medical supplies and items used for religious purposes. In the event that it is not feasible, they are to assist unbiased humanitarian groups like the ICRC in facilitating relief supplies. The Red Cross or other unbiased humanitarian assistance groups that have been approved by the parties to the dispute may continue their operations.

1977 brought two more Protocols to the Geneva Conventions were approved by a global diplomatic assembly to provide enhanced defense for victims of both domestic and external armed conflicts.

Articles 102 of Protocol I Protocol Treaty II of the Geneva Conventions of August 12, 1949, Concerning the Protection of Victims of International Armed Conflicts: Articles 28–39 Protocol a Supplementary Protocol to the 1949 Geneva Conventions on the Protection of Victims of Non-International Armed Wars Protocol II expounds upon safeguards for those entangled in intense domestic disputes, like civil wars. The case under investigation pertains to Protocol II of the 1949 Convention. The non-international protections found in Article 3 of the 1949 Geneva Conventions are enhanced and complemented by Protocol II.

Respect is due to those who choose not to participate in hostilities directly or who have stopped doing so. They must always be treated with compassion. Violence against people's life, health, or emotional or physical well-being is expressly forbidden by Protocol II. Acts of terrorism, hostage-taking, slavery, murder, cruel treatment, infringements on an individual's personal dignity, collective punishment, and pillage are all expressly prohibited. These protections are thought to be essential guarantees for each unique. When it is feasible, children should be taken to safe locations and then reunited with their family. The same humanitarian treatment outlined in the Geneva Conventions is guaranteed to everyone interned or detained during internal hostilities. bolsters the defense of medical and religious staff as well as the sick, injured, and shipwrecked. Attacks are prohibited from being used by residents and on "things indispensable to civilian survival," which include houses of worship, cultural artifacts, irrigation systems, and crops.

The Conventions and must especially the Additional Protocols to the Geneva

Convention of 1949 have come to strengthen the protection of Civilians, what then are the problems at the war zones where Civilians are still being killed, kidnapped, raped, forced to marry and children are being recruited into terrorism despite the extant Laws, the warring parties refused to observe these Laws in place. In Nigeria Boko Haram terrorists have made civilians and their properties center of target at any given opportunity they have to strike. International and Regional Organizations have to lend their support for this fight to be won.

Challenges on civilians

Terrorism is a multifaceted issue with high unpredictability in user approach. The unpredictability nature of terrorism is a major challenge in the approach of counterterrorism policy. It is high time that government agencies stop using social media and telecommunication to draw the intentions of terrorists because terrorists are cautious in using this platform to plan attacks. One of the effective penalties of the fight against Boko Haram is the social media claim for short termed and urgent procedures. The presence of military personnel sometimes has no benefits, especially when adopting intelligence-gathering methods, including violent investigation. How interrogations are carried out is fundamental to the "fight against Terrorism"; for some people, this fight can be defeated through information and cooperation (Hersh, 2004).

Most countries around the world are faced substantial difficulty in protecting their citizens against menace of terrorism and, as a result, they neglect the legal framework regarding people who are suspected with terrorist activities. Thus, that springs up new kind of criminal method that will overwhelm the traditional methods normally used to investigate, prosecute, and punish offenders who have engaged themselves with criminal activities not mindful of the fact that the act is considered terrorism" (Parry, 2007). It must be noted, that the right and dignity of citizens must be protected at all time, and ensure justice to all and sundry. Governments at all level most make fight against insecurity a priority if not citizens will continue bear the bronze of its effects on them.

Terrorism has had devastating effects on humanity in Nigeria, impacting lives, communities, and the nation's overall development. The major consequences include:

Loss of Lives and Injuries: Terrorist attacks, such as those carried out by Boko Haram, ISWAP, and bandits, have led to the deaths of thousands of Nigerians, including civilians, security personnel, and government officials. Suicide bombings, mass shootings, and kidnappings have resulted in serious injuries, leaving survivors with both physical and psychological scars.

Displacement and Humanitarian Crises: Millions of Nigerians have been displaced due to terrorist activities, particularly in the northeastern states (Borno, Yobe, and Adamawa). Many have fled their homes, seeking refuge in internally displaced persons

(IDP) camps, where they face poor living conditions, hunger, and lack of medical care.

Economic Decline and Poverty: Terrorism disrupts businesses, agriculture, and infrastructure, leading to economic decline. Many farmers in the northern region have been forced to abandon their farmlands due to attacks, contributing to food shortages and increased poverty. Foreign and local investors have also pulled out of affected areas, worsening unemployment.

Destruction of Infrastructure: Terrorist groups frequently target schools, hospitals, roads, markets, and government buildings, leading to widespread destruction. Bombings and arson attacks have crippled essential services, making it difficult for affected communities to recover.

Education Crisis: The abduction of schoolchildren, such as the Chibok and Dapchi kidnappings, has instilled fear in students and parents, leading to declining school attendance. Many schools, especially in the north, have shut down due to security concerns, worsening Nigeria's educational challenges.

Psychological and Social Impact: Terrorism leaves deep psychological wounds on victims, families, and communities. Survivors and witnesses suffer from post-traumatic stress disorder (PTSD), depression, and anxiety. Fear and insecurity disrupt daily life, causing social instability.

Religious and Ethnic Tensions: Terrorist groups like Boko Haram exploit religious and ethnic divisions, fostering distrust and animosity among communities. Their activities have exacerbated conflicts between farmers and herders, Christians and Muslims, and different ethnic groups, further destabilizing the country.

Increased Military Spending and National Insecurity: The Nigerian government has been forced to allocate huge resources to counter-terrorism efforts, diverting funds from education, healthcare, and infrastructure development. Despite military operations, terrorists continue to adapt, making security a persistent challenge.

Rise in Kidnappings and Banditry: Terrorist tactics have expanded beyond bombings to kidnappings for ransom, affecting schoolchildren, travelers, and entire villages. This has created a cycle of criminality, as ransom payments often fund further terrorist activities.

Global Reputation and Foreign Relations: Terrorism has damaged Nigeria's international reputation, making it difficult to attract foreign investment and tourism. The country has faced travel bans and restrictions, affecting diplomatic relations and economic opportunities.

Terrorism continues to pose a serious threat to humanity in Nigeria, affecting all aspects of life. To tackle this peril, it requires a different tactic, by improving security measures, economic development, interfaith dialogue, and community engagement to

counter radicalization and extremism.

Conclusion

Terrorism has nexus with continued violent attacks that lead to the destruction of people's property and lives. Terrorists' activities have great impact on security and safety of the Nigerians, government structure and fixings. Terrorism and associated activities have been reason for the huge commission of crimes including forcing people to leave their ancestral homes, starvation, prostitution, persecution and killings among other iniquities. For terrorism to be won completely, all hands must be put together.

Recommendations

Despite the amendment of Terrorism (Prevention and Prohibition) Act in 2022 which provides a better legal framework to combat terrorism, yet Nigeria is still facing several challenges in its implementation that has led to more loss of lives and property. Some key issues include:

Weak Enforcement and Implementation: Law enforcement agencies often lack the necessary training, resources, and technology to effectively enforce the Act. Corruption within security agencies sometimes leads to compromised enforcement.

Human Rights Concerns: There are allegations of human rights abuses by security forces while implementing anti-terrorism measures. Arbitrary arrests, prolonged detention without trial, and extrajudicial killings have been reported.

Legal and Judicial Bottlenecks: Delays in prosecuting terror suspects due to inefficient judicial processes. Weak case preparation by prosecutors leading to low conviction rates. Overcrowding in prisons due to prolonged detention of suspects.

Poor Intelligence Gathering and Coordination: Lack of coordination between intelligence agencies such as the DSS, NPF, and the military. Limited use of advanced surveillance technology and intelligence-sharing mechanisms.

Root Causes of Terrorism Remain Unaddressed: Poverty, unemployment, and ideological extremism continue to fuel terrorism. Poor governance and marginalization of certain groups create grievances exploited by terrorists.

Cross-border Terrorism and Regional Challenges: Terrorist groups like Boko Haram and ISWAP exploit Nigeria's porous borders to carry out attacks and retreat into neighboring countries. Weak collaboration with regional security forces hampers counterterrorism efforts.

Funding and Logistics for Terror Groups: Terrorists exploit illegal mining, kidnapping, and ransom payments to fund their activities. Difficulty in tracking and blocking terrorist financing networks

Public Trust and Cooperation: Many communities distrust security agencies due to past abuses. Fear of retaliation prevents civilians from reporting terrorist activities.

For Nigeria to effectively combat terrorism, it must strengthen law enforcement, improve intelligence-sharing, address socioeconomic grievances, and ensure the protection of human rights while implementing the Act.

References

Onah D. (2013) in Ikedinma (2014) Impact of Political Conflict and Terrorism on Nigerian National Security; Ph.D. thesis submitted to the Department of Political Science, Obafemi Awolowo University Ile-Ife

Parry, J. (2007) Terrorism and the New Criminal Processes; in William & Mary; Bill of Rights Journal, 4 (15) 342-347,

Resolution 1373 (2001) Also Creates Committee to Monitor Implementation, United Nations Security Council, 28 September 2001, SC/7158 Stathis

Kalyvas N. (2004). "The Paradox of Terrorism in Civil Wars" Journal of Ethics 8 (1) 97-138.

Tilly, C (2006) The Politics of Collective Violence; New York; Cambridge University Press United Nations Resolution 1373 2001 Available at: http://daccessdds.un.org/doc/UNDOC/GEN/N01/557/43/PDF/N0155743.pdf?OpenElement

Jinks, Derek (2006) The Applicability of the Geneva Conventions to the Global War on Terrorism; In Virginia Journal of International Law, 12 (46), Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=897591 Mohammad,

Khasawneh, T. (2015) Understanding Patterns or Relations of the Terrorist Attacks to

Prevent Future Threat shttps://www.researchgate.net/project/NetworkedPattern-Recognition-NEPAR-Frameworks-for-Understanding-and-Detecting-FutureTerrorism-

Threats M. (2010) The Afghan Mission: The Other Side of the COIN (Defense & Strategy) ISSN 1802-7199 (on-line) University of Defense.

Effects of Participatory Learning Strategy on Upper Basic Students' Retention in Basic Science and Technology in Akwanga, Nasarawa State, Nigeria

Tagans Yohanna

Integrated Science Department

Federal College of Educationn (Technical) Potiskum,

Yobe State

1Prof. Grace A. Chollom & 2Dr. Blessing S. Dawal

Science and Technology Education Department

University of Jos

Abstract

The study investigated effects of participatory learning strategy on upper Basic students' retention in basic science and technology in Akwanga, Nasarawa State, Nigeria. Three objective were stated and three research questions were raised and answered using mean and standard deviation, three hypothesis were formulated and tested at 0.05 level of significance using Analysis of Covariance ANCOVA. Quasi-experimental specifically the non-equivalent pre-test, Post-test control group design was used. The population for the study consists of 2.030 students in the fifteen public

upper basic schools in Akwanga, Nasarawa State. 78 students were selected for the study using Simple random sampling technique out of the 78 students selected for the study 43 were males and 35 were females' students. One instrument was used to collect data for the study which is Basic Science and Technology Retention Test BSTRT. The instrument was validated by three experts two from Science and Technology Education Department and one from test and Measurement University of Jos. The reliability of the instrument was established with test re-retest and the coefficient obtained were 0.873 and 0.841 for the BSTRT items. This shows that the instrument was reliable. The finding from the study revealed that Participatory learning strategy was found to be effective in improving students' retention in BS&T as shown in the result there was a significant difference between the posttest retention mean scores of students in the experimental groups. The result of the study showed that majority of students in the experimental group had higher retention as against the control group where majority of the students still have low retention mean score in BS&T. It means that participatory learning strategy can make students retain what was taught in BS&T among many others. It was concluded and recommended that teachers, curriculum planners Government should make sure that teachers use participatory learning in teaching upper basic students in secondary schools in Akwanga Nasarawa State Nigeria.

Keywords: Participatory Learning Strategy and retention.

Introduction

•F†R FPvelopment of any nation hinges on the level of scientific and technological advancement of that nation. Science and technology has contributed immensely to the development of Nigeria in many sectors of its economy, especially in the area of Communication, Transportation, Information and Communication Technology (ICT), Agriculture, Commerce and Industry and genetic Engineering to mention but a few. For this reason, careful considerations have been put in place in designing science and technology curriculum of schools in Nigeria, bearing in mind the needs and aspirations of the nation in terms of innovations and technological advancement. Nigeria government in its search for functional science education that will lead to sustainable economic and technological development has embarked on reforms in education, notably is the introduction of the 9-3-4 system of education, the establishment of federal universities of science and technology and special federal science schools and colleges, as well as, the training of science teachers using special programmes such as the millennium development goals under the technical teacher training programme to train teachers from primary schools to senior secondary school levels in Nigeria for a period between 2000 to 2015 (Ozoji, 2018).

"B F†R imary and upper basic level, science is taught as Basic Science and Technology while at the senior secondary school level, it is taught as separate science subjects such as Biology, Chemistry and Physics respectively. Basic Science and Technology is taught in primary and upper basic levels to lay a solid foundation for students to be able to study the separate science subjects in senior secondary and

higher schools. Basic Science and Technology Education being the foundation for offering separate science subjects at higher levels. It is expected that students who want to further with science subjects at senior secondary and tertiary levels must obtain a good credit IN Basic Science and Technology at Basic Education Certificate Examination (BECE) to qualify them to study science at senior secondary and tertiary school levels.

"GVR Fò F†R –x ÷ tant role of firm foundation of science at Basic school level, there have been repeated efforts by Nigerian government that have resulted to changes in policies on the kind of science to be taught at the Basic education level. These changes rooted from integrated science which aimed at exposing students to the fundamental unity of all science subjects through the process of inquiry to Basic Science and now to Basic Science and Technology. These reforms have given rise to the Basic Science and Technology, Carriculum which is a re-integration of Basic Science and Technology, Basic Technology, Computer Science and Physical and Health Education with the sole aim of developing the fundamental unity of science and skills acquisition for problem solving by students through student-centered approaches for teaching and learning. The reforms took place with a view to arriving at a Curriculum that satisfactorily meets the needs of Nigeria citizens. Emphasis is on students centered activity based approaches for teaching and learning in order to promote skill acquisition among students.

•F†R ö&lV7F—`es of Basic Science and Technology include: developing students' interest in science and technology, acquiring basic knowledge, skills in science and technology, applying the scientific and technological knowledge, skills to meet societal needs and aspiration taking advantage of the numerous career opportunities offered by science and technology, that make students become more prepared for further studies in science and technology (FRN, 2014). Despite these laudable objectives, achievement of students' in Basic Science and Technology has been below average. Analysis of students' achievement from 2018-2022 showed that students' achievement in Basic Science and Technology has not been encouraging over the years, the low achievement of students in Basic Science and Technology has been attributed to factors such as the quality of teachers teaching the subject, attitude of students toward learning the subject, broad nature of the curriculum, abstract nature of Basic Science and Technology concepts and method of teaching adopted by teachers which are likely to affect students' achievement in the subject positively or negatively.

Participatory learning-strategy can be viewed as an interactive approach either as individual or group learning process that integrate activity approach to learning and it combines social investigation, educational work with action to bring about understanding of science concepts. It is based on real-life experiences; it incorporates dialogues between or among teachers and students, critically analysis of structural organizational and systematic causes of problems (Sims, 2019). In participatory learning strategy, students' are involved in problem-solving, usually in small groups where they work together with peers. The students are allowed to choose their own learning time and make decisions about how learning is structured, including where and when it takes place. The teacher's role is that of a moderator and facilitator of the

learning process (Ajitoni, 2015). When students participate in resolving problematic situations, they imaginatively co-construct solutions that result in either immediate discomfort or satisfaction. Direct participation thus promote students passions, inspires their imagination and educating them while carrying out practical reasoning activities.

- articipatory leaning strategy (PLS) has a range of advantages, among which are: but not limited to promotion of a deep approach to learning, encouragement of higher order thinking, fostering of self-directed learning and increase collaborative interaction between students and teachers. Participatory learning strategy has been found to improve students' achievement in Mathematics and hence this study is design to investigate whether it will improve students' achievement in BST. Participatory learning strategy does not only help to improve students' achievement in a subject, but also helps to improve students' retention because achievement in Basic Science and Technology demonstrates the level of retention of learned content in the subject.
- •&WFVçF-öâ —2 F†R 7B ÷" ðwer of remembering what a student has learned after a period of time. Yemi and Adebimpe (2017) explained that retention is the ability to retain or retrieved facts and figures in the memory and applying them to solve problem situation in life. Zumyil (2019) asserted that retention is the ability of students to retain and recall information about concepts been taught in the classroom over a long period of time. The most important thing about learning is retaining the acquired knowledge and skill for future use which is the primary goal of selecting and using instructional strategy and materials for teaching in the classroom by teachers. Retention is the ability of an individual to retrieve stored information from memory and apply it to solve a problem. Retention therefore, can be seen as the ability to re-produce what learners have learnt and subsequently apply such knowledge at an appropriate time. Retention depends on several factors; prominent amongst are the instructional strategy and materials adopted by the teacher, level of participation in activities by student learning. Research by Yemi and Adebimpe (2017) also asserted that students' poor retention could be as a result of ineffective teaching strategy used by the teacher, such as; the use of lecture method and students non participation in lesson activities which generally does not improve students' achievement in Basic Science and Technology. This therefore, calls for the need for teachers to use teaching methods that involved students in carrying out learning activities which will help students' to retain what they have learned in a given lesson regardless of their gender.

Students' retention in Basic Science and Technology at the upper basic school level of education varies across gender. The disparity in retention by male and female students is of great concern to science educators, particularly Basic Science and Technology teachers. Okoro (2017) reported that female students retained better than male students when participatory learning strategy is used. Ajibola (2016) opined that, when individualize learning strategy is used male students retain better than female students. This indicates conflicting results on retention of Basic Science and Technology concepts by male and female students. Hence there is need for more empirical studies

on influence of gender on retention of students in Basic Science and Technology. This study therefore, seeks to determine the effects of participatory learning-strategy on upper basic two students' achievement and retention in Basic Science and Technology in Akwanga, Nasarawa State, Nigeria.

Statement of the Problem

- "÷ er the years there has been an outcry over students' low achievement in Basic Science and Technology in upper basic education level. Available evidence from the Nasarawa State Ministry of Education revealed that from 2018-2022 the percentage passes of students in Basic Science and Technology in Basic Education Certificate Examination (BECE) was between 43.00% and 49.00%. These results showed that the rate at which students passed Basic Science and Technology is below average. The low achievement as stated, could be attributed to some factors that include students' attitude towards Basic Science and Technology, teaching methods used by teachers in teaching Basic Science and Technology concepts, qualifications of teachers teaching Basic Science and Technology, abstract nature of Basic Science and Technology concepts, gender and students' background, but the major factor is the teachers teaching strategy.
- •F†R `ederal and State Governments of Nigeria have made efforts to improve the teaching of Basic Science and Technology in schools through the introduction of training programmes, such as, Strengthening of Mathematics and Science Education (SMASE) to enhance the ability of teachers to teach student-centred lessons in Science and Mathematics, introduction of mock examinations for students' writing BECE, organizing extra lessons and compulsory preparatory lessons for students with the aim of improving students' achievement and retention in the subject. Despite the fore-stated efforts by the government, the achievement and retention of students in Basic Science and Technology remains below average.
- •F†R 6öç6W VVæ6W2 öb æ÷B FG&W76–ær F†R &ö lem of low achievement of students in Basic Science and Technology are that more students may not be qualified to read science at the senior secondary level, there will be high rate of students' dropout, and graduating students might not be self-reliant as enshrined in the objectives of basic education. This has implications for the quest for Nigeria in becoming one of the best developed countries of the world. The researcher is not aware of any current effort aimed at improving students' achievement and retention using participatory learning strategy and hence the need to conduct this study on effect of participatory learning strategy on upper basic students' achievement and retention in Basic Science and Technology in Akwanga, Nasarawa State. This study therefore seeks to answer the broad question: What is the effect of Participatory Learning Strategy on upper basic two students' achievement and retention in Basic Science and Technology in Akwanga, Nasarawa State, Nigeria?

Aim and Objectives of the Study

•F†R –Ò öb F†R 7GVG' pas to investigate the effects of participatory learning strategy (PLS) on upper basic two students' retention in Basic Science and Technology in Akwanga, Nasarawa State, Nigeria. The specific objectives of the study are to:

investigate the effect of participatory learning strategy on students retention on upper basic two students taught Basic Science and Technology;

determine the post-test retention mean scores of male and female upper basic two students taught Basic Science and Technology using participatory learning strategy;

determine the interaction effect of treatment and gender an retention of upper basic two students in Basic Science and Technology;

Research Questions

•F†R `ollowing research questions have been raised to guide the study:

What are the effects of participatory learning strategy on students retention on upper basic two students taught Basic Science and Technology?

What are the post-test retention mean scores of male and female upper basic two students taught Basic Science and Technology using participatory learning strategy?

What are the interaction effects of treatment and gender on retention of upper basic two students in Basic Science and Technology?

Hypotheses

•F†R `ollowing null hypotheses were tested at 0.05 level of significance:

There is no significant effect of participatory learning on students retention on upper basic two students taught Basic Science and Technology.

There is no significant difference between the post-test retention mean scores of male and female upper basic two students taught Basic Science and Technology using participatory learning strategy and lecture method.

There is no interaction effect of treatment and gender on retention of upper basic two students in Basic Science and Technology.

Research Design

•F†R &W6V &6, FW6–vâ W6VB `or the study was quasi-experimental research design, specifically the non-equivalent pre-test and post-test control group design. This design was considered appropriate because quasi-experimental design was more practical and feasible where randomization was not possible and threats to internal validity can be assessed (Ali, 2016). Intact classes were randomly assigned to the experimental and control groups. Ali further stated that quasi-experimental design was a school friendly type of design without any disruption to the school classroom structure. Another reason for the use of quasi experimental research design was because the school authorities do not allow the disruption of school classroom structure. The design is illustrated below.

Population and Sample of the Study

- •F†R ÷ VÆ F–öâ `or this study consisted of upper basic two students in 15 public schools in Akwanga, Nasarawa State, Nigeria. The schools have a population of 2,030 students. Out of this population 1,082 students' representing (53.3%) are males, while 948 students representing (46.7%) are females.
- •W W" & 6–2 Gpo students are considered appropriate for this study because the class will not be preparing for any external examination unlike upper basic three classes and are therefore expected to have time to participate in the research. Upper basic two students have completed upper basic one work in Basic Science and Technology and it is one of the compulsory subjects at upper basic level. The population is shown in Table 1.

Sample

The sample for the study was made up of 38 students in the experimental group and 40 students in the control group which gives a total of 78 students (43 males and 35 females) offering Basic Science and Technology from two public secondary schools in Akwanga, Nasarawa State, Nigeria. One intact class each was used in each of the selected schools for both the control and experimental groups. The choice of two separate schools was to avoid interaction effect of the students. Also the choice of this sample size is because quasi-experimental research design does not require large sample size and the findings are for replication and not for generalisation like in survey research. The sample is shown in Table 2.

Sampling Technique

•6-x ÆR andom sampling technique of hat and draw was used to select the two schools from the 15 upper basic two secondary schools in Akwanga, Nasarawa State, Nigeria. The reason for the choice of this technique was to give every subject in the population an equal chance of being selected. In selecting the schools to be used, names of the fifteen schools were written on small pieces of paper separately and squeezed. One school was picked at a time after shaking the container so that the schools have equal chance of being picked. The first school to be picked was recorded and the container

shaken to pick the second school. The names of the two schools picked were recorded and used for the study. From the school selected, the class with more than two streams or arms was further selected using simple random sampling technique for the selection. One intact class in school A was used as experimental group while the other intact class was used as control group in school B.•

Instrument for Data Collection

The research instrument used for this study is Basic Science and Technology Retention Test (BSTRT).

Basic Science and Technology Retention Test (BSTRT)

The Basic Science and Technology Retention Test (BSTRT) was the reshuffle version of the BSTAT in terms of numbering and options that comprised of three sections namely A, B and C. Section A elicited students' basic information such as gender, school and class. Section B consisted of 30 multiple choice objective questions with four options A-D. Students' were allowed to tick the correct option. Section C had 2 essay questions. Students' were expected to answer all questions in sections B and C and the test lasted for one hour thirty minutes. The BSTRT was administered two weeks after the BSTAT to test the extent to which students retained what had been taught.

Procedure for Development of the instrument

BSTRT

- "-â FPveloping the BSTRT instrument, relevant steps were followed. The first step was to determine the purpose of the test aimed at developing an achievement test for the purpose of research. Secondly, test items were drawn from the following topics work, power, energy, excretory system, circulatory system and changes in non-living things drawn from Basic Science and Technology curriculum.
- " F le of specification was developed to guide the researcher in the construction of the test items according to the Blooms taxonomy of educational objectives (see Table 3). Fourth, to determine the item format, the test was made up of 30 multiple choice objective questions and two essay questions adopted from BECE question papers from 2018-2023. Fifth, the researcher wrote out the 30 multiple choices objective questions test items and the two essay questions based on the table of specifications. Sixth, the researcher gave out the test items to be reviewed by experts in the Science and Technology Education Department, University of Jos and one expert in the Department Educational Foundations to validate the instrument based on the content coverage and its validity. After the reviewers' report, the researcher edited the instrument as suggested by the reviewers. The selected test items were trial-tested on two schools outside the study area as pilot study.

BSTRT

The BSTRT was subjected to scrutiny by three experts one from Research Measurement and Evaluation and two experts from the Department of Science Education (Science Education Unit) all in University of Jos. These experts assessed the content and relevance of the items in the instrument. The experts scrutinised the instruments in terms of its relevance, clarity, simplicity and ambiguity of the items. While Kendall's coefficient of concordance was used to judge the agreement among the experts Kendall's (2016) indicated that for a strong agreement the coefficient value should be greater or equal to 0.60. This was used to prepare the final draft of the instruments for the study.

Reliability

BSTRT

•F†R &VÆ– &–Æ—G' öb %5E T was established using test-retest method. The reliability of BSTRT was computed in order to ensure that it measured what it was intended to measure. Omale (2017) is of the view that any coefficient between 0.7 and above is generally accepted as a sign of acceptable reliability. Therefore, the two instruments were reliable if the coefficients was 0.7 and above. So the reliability coefficient of BSTRT was 0.84 which showed that the instrument was reliable.

Procedure for Data Collection

•F†R &W6V &6†W" 6öÆÆV7FVB ÆWGFW" öb –çG&öGV7F–öâ g&öÒ F†R FW tment of Science Technology Education University of Jos (Appendix A). The researcher visited the selected schools in Akwanga Local Government Area, Nasarawa State to obtain permission from the school administrators. After the permission, the researcher proceeded to seek the consent of the students who were the participants. This was done by way of introduction and informing them of the earlier permission granted by school

Training of Research Assistants

Two research assistants (one from each school) were trained for three days by the researcher to assist in the treatment and administration of the instruments. The researcher ensured that each research assistant had a minimum teaching qualification of Nigeria Certificate of Education (NCE) in Basic Science and Technology and B Sc. Ed Basic Science and Technology with two to three years of teaching experience. This

was necessary to ensure that they possessed the required knowledge of the subject matter. In the training process, the researcher went through the instrument and the lesson plans with them. The research assistant for the experimental group was trained by the researcher on the participatory learning strategy (PLS) while the research assistant for control group was trained by the researcher on lecture method. Other criteria that were considered, apart from the qualifications and experience were interest and availability.

•F†R &W6V &6†W" Ö FR 7W&R F† B F†R `ollowing procedures were effectively carried out:

Train the research assistants on how to effectively use the lesson plan, observe them teach with the lesson plan assess their effectiveness in teaching through observation, comments and corrections. All these were done to ensure that they were capable of applying the teaching skills in participatory learning strategy, with little or no variation in their teaching effectiveness. The researcher guide them on how to administer the Basic Science and Technology Retention Test (BSTRT) (see AppendixA8).

Administration of Retention Test

•&WFVçF–öâ FW7B pas re-administered by the researcher and research assistants after the questions and answers had been reshuffled to experimental and control groups. The BSTRT was supervised by the researcher and research assistant. This was administered after two weeks from the administration of the post-test.

Scoring of the instruments

•F†R 3 VW7F–öç2 –â t B of the BSTRT instruments were scored 2 marks each. This gave 60 marks while the two essay questions in section C of the BSTRT had 20 marks each, giving a total of 40 marks for the section. A grand total mark of 100 was obtained from the instrument. The scripts were collected marked and the scores recorded in similar way, the BSTRT was administered after two weeks. This was to ascertain students' level of retention of BS&T. The scores of the pre-test and post-test were graded as 70%-100% high, 50%-69% moderate, and 0%-49% as low.

Method of Data Analysis

"FW67 iptive and inferential statistics were used in answering the research questions and in testing the hypotheses. All the research questions were answered using descriptive statistics. Specifically the mean and standard deviation; the mean shows the relative standing of each student among others. The inferential statistics, analysis of covariance (ANCOVA) was used to test hypothesis at 0.05 level of significance. In addition, if p-value is less than 0.05 level of significance the null hypothesis was rejected. This implies that the result is significant. On the other hand, if the p-value is greater than 0.05 level of significance, the null hypothesis was retained. This implies that the result is not significant. Tabachnick and Fidell (2017) stated that, analysis of covariance (ANCOVA) is a follow-up numeric response after exposure to various treatments,

| controlling for a baseline measure of that same response, it also help to remove bias. |
|--|
| Result and Discussion |
| Research Question Two |
| What are the effects of participatory learning strategy on students retention on upper basic two students taught Basic Science and Technology? |
| Table 1 |
| Effects of participatory learning strategy on the Post-test Retention Mean Scores of Students taught Basic Science and Technology and those taught using lecture method. |
| Group |
| |
| N |
| Mean |
| SD |
| - difference |
| Experimental |
| 38 |
| 60.03 |
| 8.676 |
| |
| |

20.55

Control

40

39.48

12.513

•@able 1 reveals the effects of participatory learning strategy on retention mean scores of upper basic two students taught Basic Science and Technology and lecture method. From the result, the retention mean score of upper basic two students taught using participatory learning strategy was 60.03 and a standard deviation of 8.68 higher than the retention mean score of those taught using lecture method which is 39.48 and a standard deviation of 12.51, with a mean difference of 20.55, indicating that those upper basic two students who were exposed to participatory learning strategy had a higher retention mean score than the control group who were taught with lecture method.

Hypothesis Two

There is no significant effects of participatory learning strategy on students retention on upper basic two students taught Basic Science and Technology.

Table 2

ANCOVA effects of participatory learning strategy on the Post-test Retention Mean Scores of Students in Experimental and Control Groups

Source
Type III Sum of Squares
Df

Mean Square

F

Sig.

Partial Eta Squared

Corrected Model

8260.974a

2

4130.487

34.963

.000

.482

Intercept

9451.659

1

9451.659

| 80.004 |
|---|
| .000 |
| .516 |
| Covariate |
| 30.435 |
| 1 |
| 30.435 |
| .258 |
| .613 |
| .003 |
| Group |
| 7607.864 |
| |
| 1 |
| 1 7607.864 |
| |
| 7607.864 |
| 7607.864 64.397 |
| 7607.864 64.397 .000 |
| 7607.864 64.397 .000 .462 |
| 7607.864 64.397 .000 .462 Error |
| 7607.864 64.397 .000 .462 Error 8860.513 |

Total

208142.000

78

Corrected Total

17121.487

77

a. R Squared = .482 (Adjusted R Squared = .469)

Table 2 shows the analysis of covariance (ANCOVA) result on the effects of participatory learning strategy on retention mean scores of students taught Basic Science and Technology and those taught with lecture method. From the table, F(1,75) =64.40, p < 0.05, since the p-value of 0.000 is less than 0.05 level of significance, the null hypothesis was rejected, indicating that there was a significant effect of participatory learning strategy on students retention in BSAT. The result further reveals an adjusted R squared value of .469 which means that 46.9 percent of the variation in the dependent variable which is retention in BSAT is explained by variation in the treatment of participatory learning strategy, while the remaining is due to other factors not included in this study. This implies that participatory learning strategy do help students retain what they were taught in BSAT in Akwanga, Nassarawa State.

What are the post-test retention mean scores of male and female upper basic two students taught Basic Science and Technology using participatory learning strategy?

Table 3

Post-test Retention Mean score of male and female Students taught Basic Science Technology using Participatory Learning Strategy

Group

Gender

N

Mean

SD

X-difference

Male

20

59.85

9.96

Experimental

| Female |
|--|
| 18 |
| 60.22 |
| 7.27 |
| |
| |
| Table 3 reveals that the retention mean score of female students taught Basic Science and Technology using participatory learning strategy was 60.22 and a standard deviation of 7.27 while the retention mean scores of male is 59.85 with a standard deviation of 9.96, and a mean difference of 0.37, indicating that those female students who were exposed to participatory learning strategy retained higher than males. |
| Hypothesis Four |
| There is no significant difference between the post-test retention mean scores of male and female upper basic two students taught Basic Science and Technology using participatory learning strategy and lecture method. |
| Table 4 |
| ANCOVA Result on Retention of Male and Female Students taught BST using participatory learning strategy |
| Source |
| Type III Sum of Squares |
| Df |
| Mean Square |
| F |
| Sig. |
| Partial Eta Squared |
| Corrected Model |

55.575a 2 27.788 .356 .703 .020 Intercept 6206.189 1 6206.189 79.584 .000 .695 Covariate 54.263 1 54.263 .696 .410 .019

Gender

1.434

1

1.434

.018

.893

.001

Error

2729.398

35

77.983

Total

139705.000

38

Corrected Total

2784.974

37

a. R Squared = .020(Adjusted R Squared = -.036)

"æ $\c C$ —6—2 öb 6ðvariance (ANCOVA) was conducted to determine if a significant difference exists in the retention mean scores of male and female students taught Basic Science and Technology using participatory learning strategy. Table 4 reveals that the main effect of participatory learning strategy on gender shows that $\c F(1,35)=.018$, $\c p>0.05$, since the p-value of 0.893 is greater than 0.05 level of significance, the null hypothesis was retained, indicating that there was no significant difference in the retention mean scores of male and female students taught BSAT using participatory learning strategy. The result further reveals an adjusted R squared value of -.036 which implies that there was significant effect of participatory learning strategy on male and female students' retention in BST.

Research Question Six

What are the interaction effect of treatment and gender on retention of upper basic two students in Basic Science and Technology?

Figure 1: Interraction effects of Treatment and Gender on Retention in Basic Science and Technology

"f-wW&R &W6VçG2 F†R &öf-ÆR Æ÷B 6†ðwing the interaction effect of treatment and gender of students on retention in BST. The interactive pattern shows that the plots for male and female students intercept with that of treatment since the two lines crossed; there is likelihood of an interaction effect between treatment and gender on the retention of students in BST. It also shows that the plot is extrapolated, therefore the intersection should hold; which mean that the interaction effect between treatment and gender on retention is attainable.

Hypothesis Six

There is no significant interaction effects of treatment and gender on retention of upper basic two students in Basic Science and Technology.

Table 5 Interaction effects of Treatment and Gender on Retention of Students in Basic Science Technology Source Type III Sum of Squares Df Mean Square F Sig. Partial Eta Squared **Corrected Model** 8298.820a 4 2074.705 17.166 .000 .485

| Intercept |
|-----------|
| 9403.777 |
| 1 |
| 9403.777 |
| 77.808 |
| .000 |
| .516 |
| Covariate |
| 29.746 |
| 1 |
| 29.746 |
| .246 |
| .621 |
| .003 |
| Treatment |
| 7636.148 |
| 1 |
| 7636.148 |
| 63.183 |
| .000 |
| .464 |
| Gender |
| 11.570 |
| |

11.570

.096

.758

.001

Treatment* Gender

25.729

1

25.729

.213

.646

.003

Error

8822.667

73

120.858

Total

208142.000

78

Corrected Total

17121.487

77

a. R Squared = .485 (Adjusted R Squared = .456)

"æ Ç—6—2 öb 6ðvariance (ANCOVA) was used to determine the interaction effect of treatment and gender on retention of upper basic two students taught BST using participatory learning strategy and lecture method. Table 5 reveals the main effect of treatment yielded F(1,73) = 63.18, p < 0.05, since the p value of 0.000 is less than 0.05 level of significance, the null hypothesis was rejected, indicating that there was a significant effect of treatment on the retention of upper basic two students in BST.

Also, the main effect of Gender reveals that F(1,73) = .096., p > 0.05, since the p-value of 0.758 is greater than 0.05 level of significance, the null hypothesis was retained, indicating that there was no significant effect of gender on the retention of upper basic two students in BST. Hence, male students have almost same retention mean score with female students in BST. Again, for interaction effect of treatment and gender, the result yielded F(1,73) = .213, p > 0.05, since the p-value of .646 is greater than 0.05 level of significance, the null hypothesis was retained, indicating that there was no statistically significant interaction effect of treatment and gender on the retention of upper basic two students in Basic Science and Technology

DISCUSSION

The finding from the research question showed that the mean retention scores of student' taught Basic Science and Technology using participatory-learning strategy had higher retention mean scores than those who were taught using lecture method.

This finding is in agreement with the finding of Calkins and Withers (2016) who found that participatory learning strategy improved students' retention in Basic Science and Technology. There was a significant effect of participatory learning strategy on students' retention in Basic Science and Technology as shown in the result the students in experimental group had high retention than those in the control. This implies, that when students are taught using participatory learning strategy it help them retained concept in Basic Science and Technology. This result is in agreement with the study conducted by Eastwood, Kleinberg and Rodenbaugh (2020) who found that when students are taught using participatory learning strategy they had better retention than their counterparts who were exposed to the lecture method. The qualitative aspect of the research confirmed that participatory learning strategy improved knowledge retention due to repeated opportunities for knowledge retrieval during the test this is because the interaction of students' among themselves and the learning materials help to increase active participation of students during the learning process which gives them the ability to retain and recall concepts.

" f—æF—ær g&öÒ Ö †öæPy and Harris-Reeves (2019) who agrees with the finding of this study that participatory learning strategy help both low and average students retain concept better than the lecture method. This means that the high-ability student help the other categories of learners to learn the contents, which is the essence of participatory learning strategy. This effort bridged the knowledge gaps that existed among the students before the commencement of the treatment. Conejo, Barros, Guzman and Garcia-Vinas, (2017) study also is in support of the current study their result revealed that students who engaged in the participatory learning strategy retained better than their counterparts in the control group, who were taught using lecture method. The result further disclosed that the participatory learning strategy improved students' retention in test. The implication for this study is that when students are taught using participatory learning strategy there retention ability will also improve.

The mean retention scores of female students taught Basic Science and Technology using participatory learning strategy was slightly higher than that of the male. This finding agrees with the study of Nwankwo (2021); Okwara and Upu (2017) who found that female students that were taught Basic Science and Technology using participatory learning strategy retain better than their male counterparts. This implies that the retention of female students is a little bit higher than the male students when taught Basic Science and Technology using participatory learning strategy. The result of analysis to determine if a significant difference exists in the retention mean scores of male and female students taught Basic Science and Technology using participatory learning strategy. The result revealed that the main effect of participatory learning strategy on gender and retention showed no significant effect. It then means that both male and female students' retention was the same when taught Basic Science and Technology using participatory learning strategy. The studies by Agommuoh and Nzewi (2015); Ogunleye and Babajide (2017) are in agreement with the analysed result which revealed no significant gender effect in Basic Science and Technology on students' retention when taught using participatory learning strategy. Other researchers like Nzewi (2016), Okeke (2017) and Oludipe (2020) found that both male and female retain equally in science when given equal opportunity and facilities this study agrees with the finding of the present study.

Furthermore, the study by Achor and Gbadamosi (2020); Bileya and Danjuma (2021) agrees with the finding of this study which revealed that no significant difference on students' retention between males and females students this showed that participatory learning strategy is gender friendly as regard retention. However, the findings of Iweka (2016); Kolawole (2017); Madu (2018); Obiekwe (2018); Okoro (2019); Odagboyi, (2015); Achor and Abuh, (2020) are at variance with the finding of this study who found that male' students' retain better than female students' in Basic Science and Technology their result contradicts the finding of this present study. The disproportion in the retention of male and female students' in Basic Science and Technology has been studied over the years, yet there is still variation as regards gender and students' retention. These showed that the issue of gender with regards to students' retention has not been resolved it is on this premises that the present study gave room for the inclusion of gender and students' retention as a moderating variable in this study.

Finally, on the interaction effects of treatment and gender on students' retention the findings showed a significant interaction effect of treatment and gender on the retention of the students in the concepts taught. This agrees with the findings of Agu and Samuel (2018) Anusiuba, Egbo and Nweke, (2019); and Edem and Anari (2021) which indicated a significant difference across the two groups' retention scores of students and retention of content was not dependent on gender in their separate studies. This implies that students tend to retain what was learned only when they are actively involved in the lesson and when rich learning experiences are provided. Thus, the use of participatory learning strategy as teaching strategies is one of the means through which retention can be facilitated by providing multiple learning experiences for the learning.

Conclusion

The study investigated the effects of participatory learning strategy on upper basic students' retention in Basic Science and Technology in Akwanga Nasarawa State Nigeria. This was prompted as a result of poor retention of students which was attributed to defective methodology employed during teaching by teachers.

- •F†—2 7GVG' &ðvided evidence that the use of PLS gave students the opportunity to actively participate in learning which will enhanced their retention in Basic Science and Technology concepts. It also provided support for research studies showing that the use of participatory learning strategy exposes students to the scientific process through science and technology activities, which are deliberately planned by the teacher and blended into the teaching and learning process to give room to higher cognitive achievement.
- •F†R &W7VÇB öb F†R 7GVG' &Pvealed that PLS bridged the gap between high, moderate and low retention of students by recording an increase in there and retention. This means

that PLS improve students retention in Basic Science and Technology than lecture teaching method. The implication of the findings of this study was that in using PLS students can be taught all concepts in Basic Science and Technology in a way that would enhanced and promote better retention thus making learning an enjoyable experience for them. This can translate to optimal achievement in Basic Science and Technology examinations which can lead to rapid production of a better work force for the country's technological advancement.

Recommendations

"& 6VB öâ F†R f-æF-æw2 öb F†-2 7GVG, the following recommendations are made:

upper basic two basic science and technology teachers should be encouraged to explore the application of participatory learning strategy (PLS) in their classroom teaching.

Seminars and workshops should be organized for teachers, particularly during holiday to expose them on how to use participatory learning strategy.

Authors and curriculum planners for upper basic schools should incorporate the tenets of PLS in the teaching of Basic Science and Technology.

An activity-oriented teaching strategy like PLS that presents equal learning opportunities to (male and female) students should be used in order to eliminate any undue effects of gender on students' retention.

Policy makers should utilize the results of this research in formulating policies that will make Basic Science and Technology teaching and learning relevant and more interesting to both the students and teachers, thereby expanding the scope of technological development.

References

Abeysekera, L; & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. Higher Education Research & Development. 34 (1): 1–14.

Achor, K., & Kalu, N. (2019) Effects of school outdoor activities on senior secondary two (SS II) students' retention in ecology in Jalingo Metropolis, Taraba State, Nigeria. Nigeria Educational Forum, 22(2), 83-95.

Adebanjo, A. A., & Omoniyi, T. (2018). Effect of dick and carey instructional model on

students' academic achievement in biology. Journal of the Science Teachers Association of Nigeria, 5 (3) 136 – 150.

Adegoke, B. O. (2016). Factors affecting poor academic performance in earth geometry at school certificate level: a case of three selected secondary schools in Mansa District. International Journal of Research and Innovation in Social Science, 3(5) 543-552.

Adekoya, Y. M., & Olatoye, R. A. (2019). Effect of demonstration, peer-tutoring and lecture teaching strategies on senior secondary school students' achievement in an aspect of agricultural science. The Pacific Journal of Science and Technology, 12(1), 320-332.

Adeniyi, S.A. (2019). Re-engineering human materials resource for universal basic education Journal of National Association for Technical Teachers, 2 (4) 183 – 185

Adeyemi, A.B.(2020). Effects of computer aided instruction (CAI) on students' achievement in social studies in Osun State, Nigeria. Journal of Social Sciences 3(2), 269-277.

Adeyemi, S.A, (2018). Effects of mastery learning approach on students' achievement in physics. International Journal of Scientific and Engineering Research, 5(2) 28-37.

Adeyemo, S. A. (2019). The relationship between students' participation in school based extracurricular activities and their achievement in physics. International Journal of Science and Technology Education Research, 1(6) 111-117.

Afolabi, A. B. (2021). Effects of participatory learning strategy on academic performance of students in selected schools in Edu LGA of Kwara State Nigeria. International Journal of academic Research in Business and Social Science. 2 (7) 230-239.

Aggarwal, J. C. (2016). Essentials of educational technology: teaching – learning innovation of education. Delhi: Vikas Publishing House PVT Ltd.

Agu, P. A. & Samuel, I. R. (2018). Effect of simulation instructional package on Basic Science and Technology students' achievement and retention in federal capital territory, Abuja, Nigeria. International Journal of Innovative Education Research 6(3),1-7.

Agommuoh, P. C., & Nzewi, U. M. (2015). Effects of video-taped instruction on secondary school students' achievement in physics. Journal of the Science Teachers Association of Nigeria, 38(1) 88 – 93.

Alordia, A.K., Akpadaka, T.J., & Oviogboda, J. (2016). Students' achievement in mathematics: Analysing the influence of gender and school nature. Contemporary Educational Research Journal, 9 (3), 50-56.

Ajaja, R. (2017). Concept mapping and cooperative learning strategies on students' performance in social studies in Ika South Local Government Area of Delta State. An unpublished PhD thesis, University of Port Harcourt, Rivers State.

Ajaja, F. & Eravwoke, R.H. (2020). Effects of participatory teaching strategy on senior secondary students achievement in school mathematics in Onitsha Educational Zone of Anambra State. Coou Journal of Education and Allied Displine. 19(27), 2635-3083.

Ajayi, T.A. (2011). Teaching integrated science creatively. Ibadan: Ibadan University Press

Ajayi, V.O., & Ogbeba, J. (2017). Effect of gender on senior secondary chemistry students' achievement in stoichiometry using hands-on activities. American Journal of Educational Research, 5(8), 839-842.

Ajibola, M.J. (2016). Improving the quality of integrated science and introductory technology curricular in secondary schools. Nigerian Journal of Teacher Education and Teaching, 4(1), 304-311.

Ajibola, M. A. (2018). Innovations and curriculum development for basic education in Nigeria: Policy priorities and challenges of practice and implementation. Research Journal of International Studies, 8(54), 51-58.

Ajimobola, B. (2016). Quality and students achievement. A review of state policy evidence. Educational Policy Analysis, 8(1), 39-43.

Ajitoni, S. O., (2015). Effects of cooperative learning and field-trip strategies on secondary school students 'knowledge of and attitudes to multicultural concepts in social studies. Journal of Education and Practice, 4(22), 35-42.

Akinbobola, A. O., & Ikitde, G. A. (2019). Strategies for teaching mineral resources to Nigeria secondary school science students. African Journal of Social Research and Development, 3(2), 130-138.

Akintade, CA.(2017). Effect of computer assisted instruction (CAI) on students' achievement and attitude towards latitude and longitude in Ogun State, Nigeria, University of South Africa, Pretoria.

Akpur, U. (2020). Does class participation predict academic achievement? A mixed-method study. English Language Teaching Educational Journal, 4(2),148-160.

Ali, A.G. (2018). A comparative study of students' academic performance in public examinations in secondary schools in Ondo and Ekiti States, Nigeria. Journal of Economic Theory, 3(2), 36-42.

Ali, A. (2016). Conducting research in education and sciences. Enugu: Tiah ventures.

Alzahrani, J. (2018). Investigating role of interactivity in effectiveness of e- learning Unpublished Ph.D thesis, College of Engineering Design and Physical Sciences Department.

Ameri-Golestan, A., & Nezakat-Alhossaini, M. (2017). Long-term effects of collaborative task planning vs. individual task planning on persian-speaking EFL learners' writing performance. Research in Applied Linguistics, 8(1), 146-164.

Ameh, O. P., & Dantani, Y. S. (2020). Effects of lecture and demonstration methods on the academic achievement of students in Chemistry in Nassarawa Local Government Area of Kano State. International Journal of Modern Social Sciences, 1(1), 29-37.

Amo, B. (2015). Effect of advance organizers on upper basic two students' achievement and retention in mathematics in Gboko LGA, Benue State. Unpublished M.Ed Dissertation, University of Agriculture Makurdi.

Anaehobi, C. C., & Okigbo, E. C. (2019). Effect of projected video package on secondary school students' achievement and retention in computer studies in Onitsha Education Zone. Unpublished thesis; NnamdiAzikiwe University, Awka.

Anusiuba, I. O., Egbo, F. N. & Nweke, N. M. (2019). Improving students' Achievement and Retention in Computer-studies through the use of computer-assisted tutorial instructions. International Journal of Innovation Research and Advanced Studies, 6(8), 85-91.

Anderman, R. (2018). Strategic management: A stakeholder approach, Cambridge: Cambridge •Væ—`ersity Press.

Anyagh, F. A., & Abari, S. M. (2021). Student, teacher and school environment factors as determinants of achievement in senior secondary school chemistry in Oyo State, Nigeria. The Journal of International Social Research, 1(2), 13-34.

Appleton, J., Christenson, S. L., Kim, D., & Reschly, A. L. (2016). Measuring cognitive and psychological classroom participation: validation of the student participation instrument. Journal of School Psychology, 44(5), 427-445.

Area Inspectorate Office Akwanga Nasarawa State (2023). Basic Education Certificate Examination students' results.

Arokoyu, A.A., (2017). Elements of contemporary integrated science curriculum: impacts on science education. Global Journal of Educational Research, 11(1), 49-55.

Auwal, A. (2018). Effects of teaching method on retention of agricultural science knowledge in senior secondary schools of Bauchi Local Government Area, Nigeria. International Journal of Science and Technology Educational Research, 4(4), 63-69.

Ausubel R. F. (1998). School learning New York: Holt Rinehart Winston

Awobodu, V. Y. (2016). Problem-based learning and programmed instruction as strategies for enhancing learning outcomes in Biology. Unpublished Ph.D thesis submitted to the Science and Technology Education Department, Olabisi Onabanjo University, Ago Iwoye, Ogun State.

Awofala, A.O.A. (2019). Is gender a factor in mathematics performance among Nigerian senior secondary school students' with varying schools organization and location? International Journal of Mathematics Trends and Technology, 2(3) 17-21.

| Examination of Law and Procedure for Domestication of Treaties in Uganda |
|--|
| Ву |
| Damina Joshua John |
| School of Law |
| Kampala International University |
| Kampala Uganda |
| john.damina@kiu.ac.ng /+2348036292522 |
| |
| |

Khadijat Ibrahim Maifada

School of Law

Kampala International University

Kampala Uganda

maifada.khadijat@kiu.ac.ug/+256775420379

Alexander Ayeson Epu, PhD,

alexepu@nsuk.edu.ng /+2348036136318

Faculty of Law

Nasarawa State University

Keffi, Nigeria

DR. Musa Yahaya Suleiman

suleiman.musa@binghamuni.edu.ng /+2348029717918

Faculty of Law

Bingham University

Karu, Nigeria

And

Tumusiime Geofrey

Library

Kampala International University

Kampala Uganda

ABSTRACT

Treaty domestication is the process through which international treaties, conventions, and agreements are incorporated into a country's domestic legal framework. In Uganda, this process is governed by the 1995 Constitution, which requires that international treaties be ratified and, in most cases, enacted into domestic law through parliamentary approval. Uganda follows a dualist approach, meaning that treaties do not automatically become part of national law unless they are specifically enacted through legislation. This paper examines the legal and institutional framework for treaty domestication in Uganda, highlighting key challenges such as delays in ratification, lack of harmonization between international obligations and domestic laws, and limited enforcement mechanisms. It also explores case studies of successfully domesticated treaties, including human rights instruments like the Convention on the Rights of the Child. Furthermore, the paper analyzes the role of the executive, judiciary, and civil society in ensuring effective domestication and implementation of treaties. In conclusion, the article recommends for reforms to streamline the domestication process, enhance compliance with international obligations, and strengthen enforcement mechanisms to ensure that treaty provisions are effectively implemented.

Key words; Examination, Law, Domestication, treaties and Uganda

Introduction

Vienna Convention of 1969 on the Law of Treaties1 (VCLT) defines whether or not it is contained in just one document, a treaty is any written global agreement between nations that is governed by global law or several linked ones. In addition to general principles and practices, treaties are recognized as sources of law by International Criminal Court under Article 38(1) of its statute. Treaties hold a prominent place concerning global law. To aid in its establishment, governance, and supervision of global institutions in addition to the maintenance of good and steady bonds among states. Over time, the treaty's concept has changed notably. Earlier times saw the oral form of treaties, which were sealed by the parties taking an oath to God during a ceremony that acted as the tying factor for the pact. Treaties are now legally binding between their parties and must be in writing. Article 6 states that each state is capable of concluding treaties. As a result, the Montevideo Convention of 1933 defined capability as proof of statehood in and of itself, and a state's desire or method for organizing the use of its treaty-making authority is its own business. Conventions are typically reached as intergovernmental agreements, agreements between heads of state, or agreements between states. There are two main views upon the link within international and municipal law: dualism and monism.

Dualists believe that local and international legal systems are mutually exclusive, with each having its own sources, subjects, and content. In contrast, monism views law as a hierarchical system in which new laws are self-executing and do not require

domestication by a state's legislative branch. International law is also seen as superseding municipal law. Monists contend that since all laws, domestic or foreign, have the same constituents and can therefore be automatically applied there without domestication. According to Section 204 of RTA CAP, Uganda is a dualist nation. As such, it is sovereign and has the right to enter into agreements with other countries or international organizations. However, before these agreements can become domestic law, they must first go through the legislative process. The Constitution declares that, except from what is allowed by this Constitution, unless authorized by an Act of Parliament, no entity or person other than Parliament shall have the power to establish laws that are enforceable in Uganda.

Legal Framework

In Uganda, the domestication of treaties follows a dualist legal system, meaning that international treaties do not automatically become part of domestic law upon ratification. Instead, they must be incorporated through legislation. The legal framework for this process is governed by the following:

Article 123: The President has the power to make treaties, conventions, agreements, or other arrangements between Uganda and other countries or international bodies, with approval from Cabinet. Article 79 says Parliament has the authority to make laws for the peace, order, and good governance of Uganda, including those required to give effect to international agreements. Article 287 provides that Treaties Uganda was party to before the 1995 Constitution remain binding unless amended or repealed by Parliament.

The Ratification of Treaties Act (1998). Provides the process for ratifying international treaties.

Requires treaties to be approved by Cabinet before ratification. Certain treaties, such as those affecting citizens' rights or imposing financial obligations, must be laid before Parliament for approval.

The Role of Parliament. Under Article 79, Parliament must pass specific legislation to incorporate a treaty into domestic law. Without this domestication process, treaties cannot be directly enforced in Ugandan courts.

Judicial Interpretation. Ugandan courts may use international treaties as persuasive authorities when interpreting domestic laws, even if they have not been fully domesticated. In cases like Advocates Coalition for Development and Environment v Attorney General, courts have acknowledged international instruments as guiding principles.

Sector-Specific Laws. Some treaties are incorporated into Ugandan law through sector-specific legislation, such as:

The Children Act (incorporating the UN Convention on the Rights of the Child).

The Employment Act (reflecting International Labour Organization conventions).

The Refugees Act (domesticating the 1951 Refugee Convention).

Uganda requires a treaty to be legislated into domestic law for it to have full legal effect. This process ensures parliamentary oversight but may delay implementation. However, courts can still refer to international treaties as interpretative tools

Notion of a treaty

As a colloquial term, "treaty" alludes to signed contracts, expressed or implied, amongst parties to recognize and follow a series of standards. They might also be called charters, agreements, pacts, etc. Political and declaratory terms of a treaty exclude statements. Numerous principles have been used to classify treaties. Their classification has been based on the nature of the object: political treaties (such as disarmament and alliances); administrative and constitutional agreements (like the World Health Organization's constitution, is responsible for creating the international body and managing its affairs); commercial pacts such as agreements on commerce and fishing, and criminal pacts (which specify specific international crimes and may mandate the extradition of the offender); agreements that codify global legislation; and treaties guaranteeing civil justice. A nation not party to the treaty is exempt from following its guidelines. The International Court of Justice observed that cases pertaining to the North Continental Shelf, that certain treaties may have a "fundamentally norm-creating character" and inspire global behavior and customs. The Latin dictum "pacta sunt servanda," It declares that every signature must abide by the agreement in sincerity and that it is obligatory upon them, is covered within Vienna Convention on the Law of Treaties Article 26. This is the cornerstone of all international agreements. "Reservations" is a strategy used to become a party by accepting the fundamentals of a treaty. It allows a signature to escape complying with all of the treaty's stipulations. Reservations, however, acceptance is given in circumstances that don't conflict with the treaty's goals. A deal ought to be limited to interpreted authentically, keeping in mind its goals and objectives at all times. If there are any ambiguities in the text, further methods of interpretation may be employed. Using a broader-purpose approach is one such way to interpret a treaty. On the other hand, when interpreting a treaty that is the constitution of an international organization, a purpose-oriented approach is used.

States' authority to sign treaties: One of country's sovereignty's incidents is its ability to make legally binding agreements on a global scale. A state's rights were established by the 1933 Montevideo Convention on the Rights and Duties of States right to sign treaties.

Article 12 of the 1969 VCLT specifies the conditions under which signing a treaty can convey assent to be bound by it. Certain treaties clearly state that they do not need to be ratified in order to enter into force—ratification occurs at the time of signature. The Anglo-Polish Treaty of Alliance, signed on August 25, 1939, is one such. In cases where the treaty is contingent upon acceptance, approval, or ratification, state representatives' signatures will serve only as a formality, signifying their agreement to an acceptable text that will be sent to their respective governments for the purpose of determining whether to accept or reject it.

Consent by exchange of Instruments

According to Article 13 of the 1969 convention, States' agreement have obligated by an agreement made jointly using instruments they trade must be expressed either through the instruments themselves specifying as the impact of their interaction will be that through other means demonstrating the agreement among these states stipulated the instrument transmit required that outcome.

Ratification-based consent

The fourteenth article of 1969 Ratification of the convention is required for consent. The question of which treaties require ratification is up for debate. Some authors believe that ratification is only required if both parties to the treaty expressly intend it. However, some have argued that until the treaty expressly states otherwise, ratification should be mandatory. The primary purpose of ratification was to guarantee that a state representative did not act excessively when creating a treaty. Currently, the necessity of obtaining the approval of the country's legislative branch before entering into a treaty underscores the significance of ratification. When a treaty is ratified, a state has more time to think about it and get feedback from its citizens.

Permission from occasion

This is provided for under Article 15 of the 1969 Convention. In this instance, a state joins a pact that it has not signed. States are permitted to accede to certain significant accords at a later time. There should, in theory, but no conflict between the two legal regimes because they are distinct and self-contained areas of the law. As distinct legal systems, international law would not be incorporated into the state's municipal law.

According to dualism, the two legal systems are different from one another. First, the specific relationships that each legal system governs differs: state law addresses social

relationships between individuals, whereas social contacts between states are governed by international law, which are the only entities that are liable for it.

Dualism advocates translating global laws into domestic legislation, emphasizing the distinction between the two. International law does not exist as law without this interaction. International law would not be called law at all if it did not coexist with domestic law. Accepting a treaty without amending existing domestic laws or without creating new national laws that specifically include the agreement is considered a violation of international law by the state. The pact has undoubtedly been incorporated into national law, however this cannot be contested. It cannot be applied by judges, and the public cannot depend on it. There are still national laws in place that contradict it. Dualists argue that national judges will only apply foreign law that has been transformed into domestic law.

International law by itself cannot grant any rights that are enforceable in local courts. The principles of international law can only give rise to rights and obligations in municipal courts to the extent that they are acknowledged as being included in those rules. Unlike dualist systems, monist systems affirm the primacy of international law as a rule. Sir Hersch Lauterpacht emphasized the Court's resolve to dissuade the avoidance of international duties and its consistent reaffirmation of the fundamental tenet of international law—namely, such a State is unable to utilize their local laws as a justification for failing to perform its commitments under international law.

If foreign law isn't immediately appropriate, much like in monist frameworks, it has to be "translated away" from existing national law that conflicts with international law. To adhere to international law, it must be altered or eliminated. Once more, from the perspective of human rights, the implementation of a treaty is highly uncertain if it is approved exclusively for political reasons and nations do not aim to completely convert incorporating it into national legislation or taking a monist stance on global law.

The dualist viewpoint is common in certain countries, such the UK. Once recognized by national law, British national law incorporates international law. A contract

"has no bearing on municipal law until a parliamentary act is passed to give it effect. This line of demarcation is sometimes blurred in other nations. The legislature, or a portion of it, takes part in the ratification process in most democratic countries beyond the Commonwealth, making a treaty concurrently enforceable under local and international law. Ratification thus becomes a legislative act. For example, the US Constitution states that the President may ratify conventions based on the Senate's advice and approval, provided that two thirds of the senators present concur. Treaties ratified in conformity with the Constitution are automatically incorporated into American municipal law."

In some situations, international law is immediately applicable in US courts due to the

country's "mixed" monist-dualist system. As the aforementioned quotation suggests, Article 6 of the US Constitution, treaties are part of the ultimate law for the country. However, the Supreme Court of the US has reiterated that certain treaties don't " autonomous " as recently as the Medellin v. Texas case. Prior to national and subnational courts being able to apply the terms of such treaties, they must be put into law. In the Pacquete Habana (1900) decision, the Supreme Judicial Panel of country declared the international traditional law was a component of its own legal system. It did state, however, that if the nation has a dominating legislative, executive, or judicial act, then international law would not apply

Monism Theory

The idea of monism holds that there is just one basic, ultimate essence to reality. Monists acknowledge a uniformity that the domestic and global legal frameworks. Legality of activities are established jointly by international and national legislation which the state has approved, for example via contract. Most so-called "monist" governments distinguish treaty-based international law from various categories of international law, like jus cogens or custom universal law; hence, these conditions may be partly monist or partly dualist.

Global law is automatically incorporated and takes force in domestic or national legislation in a pure monist state, negating the necessity for translation. When an international treaty is ratified, it becomes immediately a part of national law, and traditional global law is also considered to be a part of national law. Just like local law, foreign law may immediately be enforced by national judges directly invoked by citizens. If a states norm conflicts with international rules—which, in certain jurisdictions, take precedence—a judge has the authority to declare the latter invalid. In some states, in countries like Germany, treaties are legally equivalent to other laws could only override domestic legislation that were enacted prior to are approved, according to the lex posterior principle. Monism, in its purest form, requires that national

Law that is in conflict despite what it was, international law is null and void created or that is enshrined in the constitution. For example, there are some benefits through a human right standpoint. Imagine that despite ratifying a human rights convention, such as Convention on the Financing of International Trade, certain domestic legislation in that nation limit the freedom of the press. A resident regarding monism, however, views the law as a hierarchical system in which local law is subordinated to international law. They contend that all laws, whether domestic or foreign, share the same fundamental components. Hans Kelsen, a prominent supporter of the monist approach, saw law as a "integrated, united system of laws." As per his statement,

If the norms of both systems are regarded as applicable for the same space and time, then National law and international law are incompatible that can't exist separately exclusive norms. It defies logic that concurrently valid norms may be a part of two distinct, unrelated systems. Furthermore, Kelsen contends that the international legal system gives municipal law its legitimacy. As states are made up of persons, Kelsen

contended that, similar to municipal law, international law regulates individuals in response to the Dualists' key characteristics that set apart the two legal systems. Thus, both legal regimes pertain to specific human people. Similarly, the subject matter that both legal orders might legislatively address was the same. " It is not possible to support the diversified viewpoint," he asserts, "because any issue that is subject to or capable of being governed by national law may also be governed by international law."

The Monists consequently argue that foreign law should be used to courts in cases where there is a dispute between the two legal orders. Moreover, global law needs to be instantly included within municipal Legal framework without requiring any changes. Common law nations have historically been Dualists, whilst civil law nations have typically been Monists. Other Ugandan statutes use the same space; they are all governed by the Uganda Constitution.

It is not a question of whether the Constitution's treaty provisions are sufficient or inadequate, but rather of how Ugandan courts have interpreted this article that causes uncertainty over the place of treaties in the country's legal hierarchy. Undoubtedly, the 1990 Act for the Ratification and Enforcement of the African Charter on Human and Peoples' Rights, also known as Cap. 10, is a statute with a strong international component. Because it is assumed that the legislature does not intend to violate an international commitment, I would assume that in the event of a disagreement contrasting it with some other Statute, It's clauses shall take precedence over those of the other Statute. I concur with the lower court's Lordships the Charter has "a bigger impact and tenacity" above all other local law in this regard. However, this does not imply that the Charter is more important than the Constitution, as Mr. Adegboruwa, the Respondent's knowledgeable attorney, mistakenly stated. Furthermore, the fact that a statute breaches any other treaty or the African Charter does not automatically render it invalid. Neither by merely removing Cap. 10, neither the National Assembly nor the Federal Military administration will be able to erase it from our body of local laws due to its international flavor.

General Nation on Treaties Domestication

Whether monism or dualism is the better point of view is not decided by international law. Each state makes its own decisions based on its own legal customs. States are free to choose how to uphold international law and make its regulations enforceable on their inhabitants and agencies; it merely demands that its rules be observed. "International law does not require the conversion of international norms into domestic legislation. National law, not international law, determines if change is required."

International law can be adhered to by both monist and dualist governments. A monist state's judges have the ability to directly apply global law, that reduces the likelihood of rule violations. The only states where negligence or reluctance to incorporate international law into domestic law can be problematic are dualist ones. States are free

to decide how to uphold international law, but they always bear responsibility for their actions if they do not modify their domestic legal framework to do so. Either they enact a constitution that establishes a monist framework, enabling the direct application of international law and without.

Position of Treaties in Uganda's Hierarchy of Norms

While 'a nation that violates a global law provision cannot defend itself by citing its own native legal system" is customary regarding the standing of local legislation inside the international arena. State by state differs in how international law is regarded in relation to local law. Treaties and the principles of international customary law are distinguished in the United Kingdom. For the purpose of admissibility, the courts do not consider foreign law for the former. Therefore, international customary law principles are regarded as part of domestic law for evidence purposes, subject to parliamentary acts and previous court decisions. However, before being implemented in Great Britain, treaties are typically domesticated. While generally accepted principles regulated by global laws are deemed being integral elements by federal legislation and not additional move is required to make clauses of a treaty operational inside the German Federal Republic, according to the Federal Republic of Germany's Constitution.

In Uganda, section 123 in the 1999 is portrayed in the 1999 Constitution as a dualist state. Before any treaties can be implemented domestically, they must first be domesticated, according to this section. Because all Ugandan statutes are subject to the Ugandan Constitution, it follows that treaties should naturally take the same place following domestication. Although this claim is somewhat true, Uganda, comparable to Commonwealth nations, "accepted the English Common Law regulations controlling the local implementation of international law." While the Ugandan Constitution contains no exceptions regarding treaty domestication, not all treaties in the United Kingdom require it. The lack of clarity surrounding the place of treaties in Uganda's legal hierarchy is not due to the effectiveness or ineffectiveness of the treaty clause in the Constitution, but rather to the way Ugandan courts have interpreted this provision.

In the Kigula, The Supreme Court's case position has drawn criticism for a variety of grounds. Others have criticized this ruling based on the idea that municipal law has a unique location in this international legal system according to international legislation. Specifically, a state cannot argue that a violation of international law is caused by its municipal legislation. They argue that a State's sovereign authority "maintains its global flavor and looms over all local legislation, notably the Constitution," unless it " is used to revoke or reject a global accord."

Respectfully, this critique is misplaced given that Uganda is a dualist entity which upholds state sovereignty and the priority for local legislation passed the law of nations. For example, treaties must be domesticated before being implemented in Uganda. After a treaty is adopted, it becomes a part of Uganda's legal system and is, regardless of its global flavor, governed by the basic norm for the country's legal system. It's important to remember that the statute passed during the treaty's execution, not the pact itself, acts as a source of law. The assertion that "a government might accept a duty that the global scale but keep free to violation that at the national level appears legally unappealing as well ethically reproachful; it depicts an image of a negligent government" is primarily grounded in morality rather than legal principles.

Next, the decision itself will be discussed, which has, with all due respect, made people more confused about where treaties fit into Uganda's hierarchy of standards by drawing a distinction between the Federal Republic of Uganda's Constitution and additional municipal laws over statutes having a global influence.

Conclusion

No doubt, the place of treaty in international relations cannot be underestimated. It is the bedrock of so many international agreements. As such it should be given its primus position in the affairs of state within the municipal system. It was deciphered that Uganda as a nation has participated across numerous global treaties encompassing but not limited for the UN in 1982 Conventions regarding the maritime legislation and several of them. It has also caused many of them to be domesticated while a plethora of them is yet to be domesticated. To those that were domesticated, they can be applied in Ugandan courts while those that have not been domesticated do not have locus before Uganda courts.

Suggestions

Having endeavored to explain the inadequate legal framework governing the observance and domestication of international treaties or conventions in Uganda, the paper recommends the following; Uganda having adopted a dualist system does not permit an international convention to be automatically domesticated, it is therefore imperative for the government to adopt an easy framework that will facilitate the domestication of relevant international treaties or conventions. The dualist system has shown that the non-automatic domestication of human rights conventions has slowed down human rights implementation conventions. It is important that executive branch which is charged with negotiating international treaties should move at the same pace with Parliament which gives the assents in order for the process of domestication of treaties into law to be speeded up.

In addition, the low adoption rate indicates how little capable the nation is of handling procedures". By creating a mechanism, for instance a specialized committee, to look into the ways and means of adapting international treaty instruments, this low processing of protocols can be improved. I strongly recommend commitment, seriousness, honesty and sincerity in the process of domestication of ratified treaties by our national leaders. There is also the issue of preservation of power, property and other privileges by those in charge who so not like to see challenges to or criticism of the same. It is important that those in charge put aside their personal agendas and implement international conventions that will be of benefit to everyone.

Thus, it is crucial that members of Parliament be required, even by law, to make sure that, while serving, they introduce motions on the floor of the house to recommend conventions for adoption. Selected participants in National Assembly ought to be advocates for global treaties or agreements to strengthen the maintenance and defense of rights for humans. Members of the Parliament should be equipped educationally on the role and the need for its domestication to enhance national cohesion with the international community. In one important function that education may serve in hastening this process is. Politicians as well as the broader public alike must be made more conscious of this. In significance of global human rights agreements for sound government and the advancement of our country should be taught to all of us. Such awareness can be done through workshops or seminars for those in public institutions, radio and television programs for the rest of the citizenry. The topic of rights for humans ought to additionally be included in the school syllabus of secondary schools. Furthermore, the constitutional framework governing international conventions should be strengthened to ensure the domestication and observance of these conventions. Despites the government having gone a long way in establishing, there is still much work to be done, even with organizations like the Rights of Humans Organization. The example for functions for Commission state that pursuant to Human Rights Commission Act it can only investigate allegations and recommend. It lacks the authority to impose any among the suggestions it offers or implement or established mechanisms to aid with the adoption and observation for global agreements on rights for humanity.

It is therefore suggested that similar to what others have earlier suggested that institutions such as the Human Rights Commission should be empowered to make and implement decisions. The ability of the commission to only make suggestions is a hindrance for the Commission to be effective in its work because "these suggestions can either be adopted or ignored by government authorities". The Human Rights Commissions Act should be revisited so that more powers are given to the Commission in its work and also increase the funding at the Commission so that more work can be done effectively and efficiently.

Human Rights Commission Act, the commission can receive any form of grant from international organizations or contributions. I recommend that international organizations should contribute more funds so as to make the commission more independent even though her funds come from a consolidated revenue of the Federation. This will go a long way in assisting the commission in its operations. In situations where the funding is low the commission will not perform at its best and the lack of sufficient funds has limited the Commission's area of operations.

The paper suggest that Government should provide additional funds in order to allow for the provisions of such as the Rights to Culture, Economy, and Society implemented at least in a limited manner at the outset so as to improve the standard of living. Furthermore, as international human rights conventions are being domesticated, the Human Rights Commission ought to be involved. There being part of the responsibility and their understanding of the significance of human rights treaties can contribute to the conventions becoming far more domesticated. Given its participation amid the adoption of foreign treaties or meetings, it may help to expedite the procedure. Its duties ought to be limited to looking into and making suggestions at implementation Likewise.

Uganda is a dualist state, however it is crucial to make sure that all signed and ratified global agreements are obeyed, even if they are not adopted. This would not be counter to the principle of dualism because Uganda is now seen as monist-dualist state. For example the Convention against Torture should be strictly observed so as to preserve the human race as it involves cruel, inhuman and degrading treatment which can lead to death of an individual or mental incapacitation. It must be seen to be observed and

| not only be made to be theoretical in nature. |
|---|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| Effects of participatory-learning strategy on upper basic students' achievement in Basic Science and Technology in Akwanga, Nasarawa State, Nigeria |
| Tagans Yohnna |
| Integrated Science Department |
| Federal College of Educationn (Technical) Potiskum |
| Yobe State |
| Prof. Grace A. Chollom |
| Science and Technology Education Department |
| University of Jos. |
| |

Dr. Blessing S Dawal

Science and Technology Education Department

University of Jos.

ABSTRACT

The study investigates effects of participatory-learning strategy on upper Basic students' achievement in basic science and technology in Akwanga, Nasarawa State, Nigeria. Six objective were stated and six research questions were raised and answered using mean and standard deviation, six hypothesis were formulated and tested at 0.05 level of significance using Analysis of Covariance ANCOVA. Quasiexperimental specifically the non-equivalent pre-test, Post-test control group design was used. The population for the study consisted of 2.030 students in the fifteen public upper basic schools in Akwanga, Nasarawa State. 78 students were selected for the study using Simple random sampling technique out of the 78 students selected for the study 43 are males and 35 are females' students. One instrument was used to collect data for the study which is Basic Science and Technology Achievement Test BSTAT. The instrument was validated by three experts two from Science and Technology Education Department and one from test and Measurement University of Jos. The reliability of the instruments was established with test re-retest and the coefficient obtained were 0.873 and 0.841 for the BSTAT items. This shows that the instrument was reliable. Finding from the study revealed that Participatory learning strategy was found to be effective in improving students' achievement in upper basic students in BS&T as shown in the result there was a significant difference between the posttest achievements mean scores of students in the experimental and control groups. It was concluded and recommended that teachers, curriculum planners Government should ensure that teachers use participatory learning in teaching upper basic students in secondary schools in Akwanga Nasarawa State Nigeria.

Keywords: participatory-learning strategy, achievement and retention.

Introduction

•F†R FPvelopment of any nation hinges on the level of scientific and technological advancement of that nation. Science and technology has contributed immensely to the development of Nigeria in many sectors of its economy, especially in the area of Communication, Transportation, Information & Communication Technology (ICT), Agriculture, Commerce and Industry and genetic Engineering to mention but a few. For this reason, careful considerations have been put in place in designing science and

technology curriculum of schools in Nigeria, bearing in mind the needs and aspirations of the nation in terms of innovations and technological advancement, Nigeria government in its search for functional science education that will lead to sustainable economic and technological development has embarked on reforms in education, notably is the introduction of the 9-3-4 system of education, the establishment of federal universities of science and technology and special federal science schools and colleges, as well as, the training of science teachers using special programmes such as the millennium development goals under the technical teacher training programme to trained teachers from primary schools to senior secondary school levels in Nigeria for a period between 2000 to 2015 (Ozoji, 2018).

"B F†R imary and upper basic level science is taught as Basic Science and Technology while at the senior secondary school level it is taught as separate science subjects such as Biology, Chemistry and Physics respectively at senior secondary schools and beyond. Basic Science and Technology is taught in primary and upper basic levels to lay a solid foundation for students to be able to study the separate science subjects in senior secondary & higher schools. Basic Science and Technology Education being the foundation for offering separate science subjects at higher levels, it is expected that students who want to further with science subjects at senior secondary and tertiary levels must obtain a good credit at Basic Education Certificate Examination (BECE) to qualify them to study science at senior secondary and tertiary school levels.

"GVR Fò F†R –x ÷ tant role of firm foundation of science at Basic school level, there have been repeated efforts by Nigerian government that have resulted to changes in policies on the kind of science to be taught at the Basic education level. These changes rooted from integrated science which aimed at exposing students to the fundamental unity of all science subjects through the process of inquiry to Basic Science and now to Basic Science and Technology. These reforms have given rise to the Basic Science and Technology curriculum which is a re-integration of Basic Science, Basic Technology, Computer Science and Physical and Health Education with sole aim of developing the fundamental unity of science and skills acquisition for problem solving by students through student-centered approaches for teaching and learning. The reforms took place with a view to arriving at a Curriculum that satisfactorily meets the needs of Nigeria citizens. Emphasis is on students centered activity based approaches for teaching and learning in other to promote skill acquisition among students.

•F†R ö&lV7F—`es of Basic Science and Technology include: developing students' interest in science and technology, acquiring basic knowledge, skills in science and technology, applying the scientific and technological knowledge, skills to meet societal needs and aspiration taking advantage of the numerous career opportunities offered by science and technology, that make students become more prepared for further studies in science and technology (FRN, 2014). Despite these laudable objectives, achievement of students' in Basic Science and Technology has been below average. Analysis of students' achievement from 2018-2023 showed that students' achievement in Basic Science and Technology has not been encouraging over the years, the low achievement of students in Basic Science and Technology has been attributed to

factors such as the quality of teachers teaching the subject, attitude of students toward learning the subject, broad nature of the curriculum, abstract nature of Basic Science and Technology concepts and method of teaching adopted by teachers which are likely to affect students' achievement in the subject positively or negatively.

- "6†-Pvement in a subject is a successful completion and accomplishment in a subject which brings about a sense of satisfaction and a measure of victory in the subject. The measure of achievement in a schools subject is indicated by score obtained at the end of assessing the student either orally, written or through practical examination. Achievement in Basic Science and Technology has been persistently associated with the kind of instructional strategies employed by teachers who teach the Basic Science and Technology. Basic Science and Technology teaching must be taught through the use of problem solving method, cooperative teaching strategy, scaffolding, and participatory learning strategy to mention but a few. This will foster students' understanding of Basic Science and Technology concepts. A research by Samba and Eriba (2018) found that good used of teaching strategy improves students' achievement in Basic Science and Technology. This implies a need for BST teachers to use instructional strategies that are students-centered approaches which expose students to actively participate in carrying out activities that might enhance their achievement in Basic Science and Technology. Examples of such strategies are jigsaw strategy, thinkpeer-share strategy and participatory learning strategy to mention but a few.
- articipatory learning-strategy can be viewed as an interactive approach either as individual or group learning process that integrate activity approach to learning and it combines social investigation, educational work with action to bring about understanding of science concepts. It is based on real-life experiences; it incorporates dialogues between or among teachers and students, critically analyses of structural, organizational and systematic causes of problems (Sims, 2019). In participatory learning strategy, students' are involved in problem-solving, usually in small groups where they work together with peers. The students are allowed to choose their own learning time and make decisions about how learning is structured, including where and when it takes place. The teacher's role is that of a moderator and facilitator of the learning process (Ajitoni, 2015). When students participate in resolving problematic situations, they imaginatively co-construct solutions that result in either immediate discomfort or satisfaction. Direct participation thus promote students passions, inspires their imagination and educating them while carrying out practical reasoning activities.

"vVæFW" —2 â 67 ibed attribute that differentiates feminine from masculine to the social roles and relationships between male and female in a given context. It is a sociocultural construct that assigns roles, attitudes and values considered appropriate for each sex. Several contrasting findings have been reported regarding students' achievement with respect to gender. Ogundele, Okunlola, Damilola, and Godfrey (2020) found out that, male students achieved higher than female students in Basic Science and Technology. On the contrary, Anaehobi and Okigbo (2019) in their studies discovered that, there was no significant difference between achievement of male and female students in Basic Science and Technology. As regard gender, discussions are

inconclusive regarding students' achievement in Basic Science and Technology. Amidst these contrasting reports, the present study will seek to determine the effect of the treatment on student achievement and retention based on gender.

STATEMENT OF THE PROBLEM

- "÷ er the years there has been an outcry over students' low achievement in Basic Science and Technology in upper basic education level. Available evidence from the Nasarawa State Ministry of Education revealed that from 2018-2023 the percentage passes of students in Basic Science and Technology in Basic Education Certificate Examination (BECE) was between 43.00% and 49.00%. These results showed that the rate at which students passed Basic Science and Technology is below average and that students' achievement persistently remained below 50 percent for five years. The low achievement as stated, could be attributed to some factors that include students' attitude towards Basic Science and Technology, teaching methods used by teachers in teaching Basic Science and Technology concepts, qualifications of teachers teaching Basic Science and Technology, abstract nature of Basic Science and Technology concepts, gender and students' background, but the major factor is the teachers teaching methods.
- •F†R `ederal and State Governments of Nigeria have made efforts to improve the teaching of Basic Science and Technology in schools through the introduction of training programmes, such as, Strengthening of Mathematics and Science Education (SMASE) to enhance the ability of teachers to teach student-centred lessons in Science and Mathematics, introduction of mock examinations for students' writing BECE, organizing extra lessons and compulsory preparatory lessons for students with the aim of improving students' achievement in the subject. Despite the fore-stated efforts by the government, the achievement and retention of students in Basic Science and Technology remains below average.
- •F†R 6öç6W VVæ6W2 öb æ÷B FG&W76–ær F†R &ö lem of low achievement of students in Basic Science and Technology are that more students may not be qualified to read science at the senior secondary level, there will be high rate of students' dropout, and graduating students might not be self-reliant as enshrined in the objectives of basic education. This has implications for the quest for Nigeria in becoming one of the world's best developed countries of the world. The researcher is not aware of any current effort aimed at improving students' achievement and retention using participatory learning strategy and hence the need to conduct this study on effect of participatory learning strategy on upper basic students' achievement and retention in Basic Science and Technology in Akwanga, Nasarawa State. This study therefore seeks to answer the broad question: What is the effect of PLS on upper basic two students' achievement and retention in Basic Science and Technology in Akwanga, Nasarawa State, Nigeria?

•F†R –Ò öb F†R 7GVG' pas to investigate the effects of participatory learning strategy (PLS) on upper basic two students' achievement and retention in Basic Science and Technology in Akwanga, Nasarawa State, Nigeria. The objectives of the study are to:

determine the pre-test and post-test achievement mean scores of upper basic two students taught Basic Science and Technology using participatory-learning strategy and those taught using lecture method.

investigate post-test achievement mean scores of male and female upper basic two students taught Basic Science and Technology using participatory learning strategy.

RESEARCH QUESTIONS

•F†R `ollowing research questions have been raised to guide the study:

What are the pre-test and post-test achievement mean scores of upper basic two students taught Basic Science and Technology using participatory-learning strategy and those taught using lecture method?

What are the post-test achievement mean scores of male and female upper basic two students taught Basic Science and Technology using participatory learning strategy?

HYPOTHESES

•F†R `ollowing null hypotheses were tested at 0.05 level of significance:

There is no significant difference between the pre-test and post-test achievement mean scores of upper basic two students taught Basic Science and Technology using participatory-learning strategy and those taught using lecture method.

There is no significant difference between the post-test achievement mean scores of male and female upper basic two students taught Basic Science and Technology using participatory learning strategy.

MOTHODOLOGY

The research design used for the study was quasi-experimental research design, specifically the non-randomized pre-test and post-test control group design. The populations for this study consist of upper basic two students in 15 public upper basic schools in Akwanga, Nasarawa State, Nigeria. The schools have a population of 2,030 students. Out of this population 1,082 students' representing (53.3%) are males, while 948 students representing (46.7%) are females. The sample for the study were made up of 78 (43 males and 35females) students offering Basic Science and Technology from two public secondary schools in Akwanga, Nasarawa State, Nigeria. One intact class each was used in each of the selected schools for both the control and

experimental groups. Simple random sampling technique of hat and draw was used to select the two schools from the 15 upper basic two secondary schools in Akwanga, Nasarawa State, Nigeria. The reason for the choice of this technique, according to Obeka (2018) is to give every subject in the population an equal chance of being selected. In selecting the schools to be used, names of the fifteen schools were written on small pieces of paper separately and squeezed. One school was picked at a time after shaking the container so that the schools have equal chance of being picked. The first school to be picked will be recorded and the container shaken to pick the second school. The name of the two schools picked were recorded and used for the study. The research instrument that was used for this study is Basic Science and Technology Achievement Test (BSTAT) Descriptive and inferential statistics was used in answering the research questions and in testing the hypothesis. All the research questions were answered using descriptive statistics. Specifically the mean and standard deviation, the mean showed the relative standing of each student among others. The inferential statistics was tested using analysis of covariance (ANCOVA) at 0.05 level of significance.

RESULT AND DISCUSSIONS

Research Question One

•v† B &R F†R &R×FW7B æB ÷7B×FW7B 6†—Pvement mean scores of upper basic two students taught Basic Science and Technology using participatory-learning strategy and those taught using lecture method?

| - | Table 1 |
|---|---|
| ŧ | Pre-test and Posttest Achievement Mean Scores of the Students' Taught BSAT betweer the experimental and control group |
| (| Group |
| - | Test |
| 1 | N |
| | |
| 3 | SD |
| | |
| ľ | Mean Gain |
| ľ | Mean Difference |
| E | Experimental |
| F | Pre-test |
| 3 | 38 |
| | |

8.000

15.69

Post-test

38

55.74

7.081

15.41

Control

Pre-test

40

34.33

8.100

6.00

| Post-test |
|---|
| 40 |
| 40.33 |
| 10.552 |
| |
| |
| |
| Table 1 showed that the upper basic two students' taught Basic Science and Technology using participatory learning strategy and lecture method had pre-test mean scores of 40.05 and 34.33 with standard deviation scores of 8.00 and 8.10 respectively. The post-test mean scores of the experimental and control groups were 55.74 and 40.33, with standard deviation scores of 7.08 and 10.55, respectively. The mean gains were 15.69 and 6.00 for the students' taught BST using participatory learning strategy and those taught with lecture method respectively with a mean difference of 15.41. This implies that participatory learning strategy helped improved students' achievement in BST better than lecture method. |
| Research Question three |
| What are the post-test achievement mean scores of male and female upper basic two students taught Basic Science and Technology using participatory-learning strategy? |
| Table 2 |
| Achievement Mean score of Male and Female Students in the Experimental Groups |
| Group |
| Gender |
| N |
| Mean |
| SD |

X-difference Male 20 55.30 8.45 Experimental 0.92 Female 18 56.22 5.38

Table 2 presents the achievements mean scores of male and female upper basic two students taught Basic Science and Technology using participatory learning strategy. From the result, the achievements mean score of male students taught Basic Science and Technology using participatory learning strategy was 55.30 and a standard deviation of 8.45 slightly lower than the achievements mean score of females which is 56.22 and a standard deviation of 5.38, with a mean difference of 0.92, indicating those female students who were exposed to participatory learning strategy achievement is

slightly higher than male students in BST.

Hypothesis One

There is no significant difference between the pre-test and post-test achievement mean scores of upper basic two students taught Basic Science and Technology using participatory-learning strategy and those taught using lecture method.

Table 3

ANCOVA Result on pre-test and Post-test Achievement Mean Scores of Students taught BSAT using Participatory Learning Strategy and Lecture Method

Source

Type III Sum of Squares

Df

Mean Square

F

Sig.

Partial Eta Squared

Corrected Model

4644.866a

2

2322.433

28.176

.000

.429

Intercept

7177.058

1

| 7177.058 |
|-----------|
| 87.072 |
| .000 |
| .537 |
| Covariate |
| 16.176 |
| 1 |
| 16.176 |
| .196 |
| .659 |
| .003 |
| Group |
| 3924.414 |
| 1 |
| 3924.414 |
| 47.611 |
| .000 |
| .388 |
| Error |
| 6181.967 |
| 75 |
| 82.426 |
| |

Total

189293.000

78

Corrected Total

10826.833

77

a. R Squared = .429 (Adjusted R Squared = .414)

"æÇ—6—2 öb 6ðvariance (ANCOVA) was conducted to determine if a significant difference exists in the post-test achievement mean scores of students taught Basic Science and Technology using participatory learning strategy and those taught with lecture method. Table 3 shows that F(1,75) =47.61, p < 0.05, since the p-value of 0.000 is less than 0.05 level of significance, the null hypothesis was rejected, indicating that there was a significant effect of participatory-learning strategy on students achievement in BST. The result further reveals an adjusted R squared value of .414 which means that 41.4 percent of the variation in the dependent variable which is achievement in BST is explained by variation in the treatment of participatory learning strategy, while the remaining is due to other factors not included in this study. This implies that participatory learning strategy improve students achievement in BST than lecture

method in Akwanga, Nassarawa State, Nigeria. Hypothesis Two There is no significant difference between the post-test retention mean scores of upper basic two students taught Basic Science and Technology using participatory-learning strategy and those taught using lecture method. Table 4 ANCOVA Post-test Result on the Retention Mean Scores of Students in **Experimental and Control Groups** Source Type III Sum of Squares Df Mean Square F Sig. Partial Eta Squared Corrected Model 8260.974a 2

4130.487

| .000 |
|-----------|
| .482 |
| Intercept |
| 9451.659 |
| 1 |
| 9451.659 |
| 80.004 |
| .000 |
| .516 |
| Covariate |
| 30.435 |
| 1 |
| 30.435 |
| .258 |
| .613 |
| .003 |
| Group |
| 7607.864 |
| 1 |
| 7607.864 |
| 64.397 |
| .000 |
| |

34.963



.462

Error

8860.513

Table 4 shows the Analysis of Covariance (ANCOVA) result on retention mean scores of students taught Basic Science and Technology using participatory learning strategy and those taught with lecture method. From the table, F(1,75) = 64.40, p < 0.05, since the p-value of 0.000 is less than 0.05 level of significance, the null hypothesis was rejected, indicating that there was a significant effect of participatory learning strategy on students retention in BSAT. The result further reveals an adjusted R squared value of .469 which means that 46.9 percent of the variation in the dependent variable which is retention in BSAT is explained by variation in the treatment of participatory learning strategy, while the remaining is due to other factors not included in this study. This implies that participatory learning strategy do help students retain what they were taught in BSAT in Akwanga, Nassarawa State.

DISCUSSIONS

•F†R 7GVG' –àvestigated the effects of participatory-learning strategy on upper basic students' achievement and retention in Basic Science and Technology in Akwanga, Nasarawa State, Nigeria. The instruments used for data collection was Basic Science and Technology Achievement Test (BSTAT). The result of the analysis showed that students that were taught using participatory-learning strategy from the research question had a mean gain higher than their counterparts in lecture method. The results indicated that there was a significant effect of participatory-learning strategy on students' achievement in Basic Science and Technology. This implies that participatory-learning strategy improves students' achievement in Basic Science and Technology than lecture method. The finding is in agreement with the findings of (Neer & Kircher (2019), Ajaja, & Eravwoke (2020), & Iroegbu (2017) who found that participatory-learning strategy improves students' achievement in Basic Science and Technology. The implication of this is that participatory-learning strategy can improve students' achievement in Basic Science and Technology

Again Ajaja, and Eravwoke (2020) in their study found that participatory-learning strategy improves students' achievement, in Basic Science and Technology which also agrees with the finding of the study. On the contrary, the finding of this study does not agree with Koster (2016), who reported that participatory learning strategy does not improve students' achievement, in Chemistry an reason been that the study did not use control.

" f—æF—ær g&öÒ Ö †öæPy and Harris-Reeves (2019) also agrees with the finding of this study that participatory learning strategy help both low and average students retain concept better than the lecture method. This means that the high-ability students help the other categories of learners to learn the contents which are the essence of participatory learning strategy. This effort bridged the knowledge gaps which existed among the students before the commencement of the treatment. Conejo, Barros, Guzman & Garcia-Vinas, (2017) study also is in support of the present study their result revealed that students who engaged in the participatory-learning strategy retained better than their counterparts in the control group, who were taught using lecture method. The outcomes further disclosed that the participatory-learning strategy

improved students' retention in test. The implication for this study is that when students are taught using participatory-learning strategy there retention ability will also improve.

•&Vv &F-ær F†R &öÆR öb vVæFW" öå 7GVFVcG9 achievement in Basic Science and Technology when taught using participatory-learning strategy, the result revealed that the mean scores of female is slightly higher than that of the male. This result is in agreement with the finding of Kwame, McCarthy and Gyan (2017) who found that females in a mixed-sex school taught with participatory-learning strategy achieved higher than their male counterparts. The analysed result further revealed that the effect of participatory-learning strategy on male and female students' revealed no significant difference which shows that, there was no significant effect of participatory-learning strategy on male and female students in Basic Science and Technology when taught using participatory-learning strategy this result is in line with the findings of Igbo, Onu and Obiyo (2016), Alordiah, Akpadaka and Oviogboda (2016) who found that there was no significant difference in the achievement mean scores of male and female students' who were taught Basic Science and Technology using participatory-learning strategy both male and female students' have equal achievement in Basic Science and Technology. However, the result is at variant with the finding of Afolabi (2021) who found that male students achieved better than female students. The implication of this is that male and female student' taught Basic Science and Technology using participatorylearning strategy achievement was improved.

Conclusion

The study investigated the effects of participatory learning strategy on upper basic students' achievement in Basic Science and Technology in Akwanga Nasarawa State Nigeria. This was prompted as a result of poor achievement of students which was attributed to defective methodology employed during teaching Basic Science and Technology by teachers.

- •F†—2 7GVG' &ðvided evidence that the use of PLS gave students the opportunity to actively participate in learning which also enhanced their achievement in Basic Science and Technology concepts. It also provided support for research studies showing that the use of participatory learning strategy exposes students to the scientific process through science and technology activities, which are deliberately planned by the teacher and blended into the teaching and learning process to give room to higher cognitive achievement.
- •F†R &W7VÇB öb F†R 7GVG' &Pvealed that PLS bridged the gap between high, moderate and low achievement of students by recording an increase in their achievement. This means that PLS improve students achievement in Basic Science and Technology than lecture teaching method. The implication of the findings of this study was that in using PLS students can be taught all concepts in Basic Science and Technology in a way that would enhanced their achievement thus making learning an enjoyable experience for them. This can translate to optimal achievement in Basic Science and Technology examinations which can lead to rapid production of a better work force for the country's

technological advancement.

Recommendations

Based on the findings of this study, the following recommendations are made:

upper basic two basic science and technology teachers should be encouraged to explore the application of participatory learning strategy (PLS) in their classroom teaching.

Seminars and workshops should be organized for teachers, particularly during holiday to expose them on how to use participatory learning strategy.

Authors and curriculum planners for upper basic schools should incorporate the tenets of PLS in the teaching of Basic Science and Technology.

An activity-oriented teaching strategy like PLS that presents equal learning opportunities to (male and female) students should be used in order to eliminate any undue effects of gender on students' achievement.

Policy makers should utilize the results of this research in formulating policies that will make Basic Science and Technology teaching and learning relevant and more interesting to both the students and teachers, thereby expanding the scope of technological development.

REFERENCES

Afolabi, A. B. (2021). Effects of participatory learning strategy on academic performance of students in selected schools in Edu LGA of Kwara State Nigeria. International Journal of academic Research in Business and Social Science. 2 (7) 230-239.

Agommuoh, P. C., & Nzewi, U. M. (2015). Effects of video-taped instruction on secondary school students' achievement in physics. Journal of the Science Teachers Association of Nigeria, 38(1) 88 – 93.

Ajaja, & Eravwoke (2020). Effects of jigsaw teaching strategy on senior secondary students achievement in school mathematics in Onitsha Educational Zone of Anambra State. Coou Journal of Education and Allied Displine. 19(27), 2635-3083.

Ajaja, R. (2017). Concept mapping and cooperative learning strategies on students' performance in social studies in Ika South Local Government Area of Delta State. An unpublished PhD thesis, University of Port Harcourt, Rivers State.

Alordia, A.K., Akpadaka, T.J., & Oviogboda, J. (2016). Students' achievement in mathematics: Analysing the influence of gender and school nature. Contemporary Educational Research Journal, 9 (3), 50-56

Calkins, G.S., & Withers, T. N. (2016). Teaching science as investigation: modeling inquiry through learning cycle lesson, New Jersey: Pearson Merill. Prentice Hall

Conejo, H.J., Barros, D.E. Guzman, K.D. & Garcia-Vinas, L.P. (2017). Participatory and individualized learning strategy: New Delhi India.

East-Wood, G., Kleinberg, W. J., & Rodenbaugh, A.G., (2020). Gender differences in basic science achievement of private junior secondary school students in Obio/Akpor Local Government Area, Rivers State. International Journal of Scientific Research in Education, 12(2), 320-329.

Federal Ministry of Education (2014). Senior secondary school curriculum: biology for senior secondary school. Abuja: NERDC Press.

Igbo, J.N., Onu, V, C., & Obiyo, N.O. (2016). Impact of gender stereotype on secondary schools students' self-concept and academic achievement. SAGE Open, 1-10.

Iroegbu, A. (2017). Effects of co-operative learning strategy with models on academic achievement and retention of biology concepts among pre-ND students in Kaduna State Nigeria. Unpublished Ph. D. Dissertation. ABU., Zaria.

Koster (2016). The effect of using cooperative learning strategy on graduate students' academic performance and gender differences. International Journal of Humanity and Science 12 (21), 232-241.

Kwame, B; McCarthy, P.; & Gyan, E. (2017). Gender differences in elective mathematics. Journal of education of high school Ghana. 2 (3) 234-243

Mahoney, F.N & Harris-Reeves, F. (2019).effects of participatory learning strategy on academic achievement of higher grade II students. Global Advance Research Journal of Education 5 (2), 28-3.1

Neer, P., & Kircher, N. (2019). Possibilities and challenges in working with participatory methods, in N. Mtana, E. Mhando & G. Hojlund (Eds), Teaching and learning in primary education in Tanzania, Dar-es-salaam: Ecoprint.

Nwankwo, O. (2021). Breaking gender barrier in science, technology and mathematics education. Nigeria Journal of Research in Education 2 (6), 98-108.

Nzewi, U. M. (2016). It's all in the brain of gender and achievement in science and technology education. 51st inaugural lecture of the University of Nigeria, Nsukka.

Ogundele, M.O, Okunlola, O. R, Damilola, J. C., & Godfrey, S. (2020). Implementation of basic science curriculum in Nigeria private secondary schools: problems and prospects. Integrity Journal of Education and Training 4(1), 1-7.

Ogunleye, B. O., & Babajide, V. F. T. (2017). Commitment to science and gender as determinants of students' achievement and practical skills in physics. Journal of the Science Teachers' Association of Nigeria, 46(1), 125 – 135.

Okeke E.A.C. (2017). Making science education accessible to all. inaugural lecture Series 23. University of Nigeria, Nsukka.

Okwara, J.K. & Upu, G.S. (2017). Gender and achievement of students in integrated science as a predictor of science in JSS. Journal of Research in Curriculum and Teaching, 5 (1) 397-406

Oludipe, D. (2020). Gender difference in Nigerian junior secondary students' academic achievement in basic science. Journal of Educational and Social Research, 2(1). 93 – 101.

Yemi, O. V., & Adebimpe, J. (2017). Effect of gender on senior secondary school chemistry students' achievement in stoichiometry using hands-on activities. American Journal of Educational Research, 5(8), 839-842.

Zumyil C. F. (2019). Nigerian science teachers views of integrated science and also students in the integrated science and non-integrated science subject. Women in Colleges of Education Journal, 6 (4), 234-245.

Examination of the practice of the doctrine of de novo trial: its effects on justice system in Nigeria.

Ву

Damina Joshua John

School of Law

Kampala International University

Kampala Uganda

john.damina@kiu.ac.ng /+2348036292522

And

Khadijat Ibrahim Maifada

School of Law

Kampala International University

Kampala Uganda

maifada.khadijat@kiu.ac.ug /+234 803 634 3332

And

Alexander Ayeson Epu, PhD,

alexepu@nsuk.edu.ng/+234 803 613 6318

Faculty of Law

Nasarawa State University

Keffi, Nigeria

And

Yasein Hassan M. Osman (Ass. Prof)

yasein@kiu.ac.ug /+249 91 267 2146

School of Law

Kampala International University

Kampala Uganda

And

Kelechi Onwubiko

kelechi.onwubiko@kiu.ac.ug / +256 754 319421

School of Law

Kampala International University

Kampala Uganda

Abstract

Trial de novo has been a problem in the justice system both in civil and criminal trials, it has attracted unwanted delays, frustrations and expenses, the paper discussed the effects of trial de novo in Nigeria and also examined the style and implications of starting a matter afresh that had been previously part-heard by an outgoing judge. The significance of this paper was to analyse the cost and time implications to the Court and litigants as a result of de novo and to proffer solution to the existing problem. The article adopted doctrinal method of research where relevant materials in the related topic were studied and analysed, using primary and secondary sources, the views of scholars were examined and considered in the work. In conclusion the article recommended the abolition of trial de novo for defeating the aim of justice due to time wasting, financial losses and loss of litigants' confidence in the justice system.

Keyword; Trial, De Novo, Effect on Justice System, Nigeria.

Introduction

The research begins by examining the legal framework that provides for trial de novo in Nigeria with regards to the Constitution of the Federal Republic of Nigeria 1999 (CFRN) as amended, Administration of Criminal Justice Act (ACJA) 2015 and other (ACJLS) established by states in subsequent years and relevant case laws to that effect. The Constitution has not specifically provided for trial de novo as other local laws have provided. The work delves into the implications of trial de novo in Nigeria and the effects of it on the parties in both civil and criminal cases; this will mean judiciary itself has embarked on an excise in futility. De novo trial attracts more cost on the litigants, causes them to lose hope on judiciary and above all it negates the principle of reasonable time as written in the CFRN. It provides that a trial of a particular case shall be concluded within a reasonable time.

The Constitution only contemplates the strictness of trial de novo on Supreme Court and Court of Appeal. The National Assembly and the respective State Houses of Assembly in Nigeria must come to terms with the reality that judiciary is the last hope of common man and if the confidence of the people is lost on the judiciary, the effect will result to lawlessness and self-help. Trial de novo is one of those factors which may result to drastic reduction of filing cases in courts and will fuse people to resort to self-help. This delay does not go down well with other nations having so much respect for Nigeria as a giant of Africa. Trial de novo does not just affect judiciary and the litigants alone, it also attacks the reputation of the presiding judge because society may classify him as person who cannot read and assimilate the record of his predecessor in order to continue from where he stopped.

It is an undisputable fact that, every member of the Bar is a product of Nigerian Law School where adequate training on how to analyse and evaluate facts are given to all members of the profession before he/she is licensed to practice as a Barrister and Solicitor of the Supreme Court. Every successor of a particular court should be deemed to be eminently qualified to takeover that court and should be able to continue with the proceedings part-heard by his predecessor. In other words, using the records of proceedings of his predecessor to ensure that justice is seen to have been done in all the matter part-heard by his predecessor.

Concept of Trial De Novo

It is a notorious fact that trial de novo dates back to the colonial era and since its inception, it has never been amended by National Assembly or State Houses of Assembly and that connotes in our judicial system that it has come to stay. The concept of trial de novo is perceived by some scholars to be counterproductive to the justice system, while to others it is meant to preserve justice where a first-hand judge will be more grounded with the facts presented before him and will be able to evaluate such facts and draw conclusion. However, the Constitution has clearly spelt out the primary function of judiciary which is to interpret the law and not necessarily hearing those facts before interpreting them. But it depicts reading the laws and interpreting them without seeing the witnesses in court. Judges are expected to have sound knowledge of these facts presented before drawing conclusion on them. The doctrine of trial de novo was

imposed on us by the Acts of the National Assembly or the Laws of the State. This paper is of the view that laws that have become archaic should be repealed, therefore, trial de novo is one of those principles that had over stayed in our legal system. More so it has detrimental effects on the Courts and parties. The doctrine of trial de novo means that the plaintiff or the prosecution is given another chance to re-litigate his matter afresh and also to reconvene all the witness earlier taken. The witnesses may contradict themselves in subsequent testimony and could cause the scale of justice to be weighed against them. This happens because parties sometimes do get the record of proceedings of the former judge to tender same before the new judge. That sounds inimical to the doctrine itself, if the record of the former judge is not allowed for the proceeding to continue, why will that Law permit the same record to be obtained and tendered.

The concept of de novo is to be applied holistically, for example, at the Court of Appeal, the Lordships can without re-calling witnesses read through the record of proceedings from the trial Courts to correct the wrong of the trial judge without hearing from the witnesses. The same atmosphere should be given to trial judges irrespective of the courts they preside. In a nutshell this procedure is causing more harm to the justice system since the spirit of the Constitution is to complete the trial within a reasonable time. The context of reasonable time can only be understood when placing it side by side with a reasonable man; trial de novo will run short of the context of reasonableness.

It seems that the doctrine of trial de novo is restricted to the courts of first instance but does not apply in election petition matters even at the tribunal level. In Orubu v National Electoral Commission. Justice Uwais held in clear teams that trial de novo doesn't apply in election matters. The concept of de novo to some scholars is that justice should be done to whomever irrespective of how long the matter will take to get to justice. However, in some cases time is usually of the essence where if not duly complied with the subject matter will be taken away by event. For example, in commercial litigation many business people will raise their concern against the delay in justice delivery in subject matter of business. Trial de novo can also affect students who are unjustly expelled from their institutions for one flimsy reason or the other, if such student takes steps to challenge the school's decision in court for review and re-instatement, he will discover that he is entangled with trial de novo which at the end the matter spends longer years than their school calendar. Some students will prefer to take fresh admission elsewhere rather than their rights to be determined by the Court.

Legal frameworks

In Nigeria, the concept of trial de novo a new trial or retrial is well recognized under its legal framework. A trial de novo is typically ordered when a case is retried in the same court or transferred to another court, often as a remedy for procedural or substantive irregularities in the original trial. The legal framework governing trial de novo in Nigeria is shaped by statutory provisions, judicial precedents, and constitutional principles. The purpose for it is to ensure that justice is seen to be done but reverse is always the case. Below are key aspects of this framework:

Constitution

The Constitution provides the fundamental principles guiding trials, including:

Fair Hearing: Section 36 guarantees the right to a fair trial. If a trial is found to have violated this right, a court may order a retrial to ensure justice. Jurisdiction of Courts: The Constitution establishes and defines the jurisdiction of courts, which influences their ability to conduct a trial de novo.

Criminal Procedure

Criminal Procedure Act (CPA) (for Southern Nigeria) and the Criminal Procedure Code (CPC) (for Northern Nigeria): These laws provide the procedural framework for criminal trials. If a magistrate or judge who heard part of a case is unable to continue (e.g., due to transfer, death, or recusal), a new trial may be ordered under these laws. For instance, under Section 63 of the CPA, if the presiding judge or magistrate is unable to complete a case, another magistrate or judge may begin the trial anew unless the accused consents to proceed based on the existing record.

Administration of Criminal Justice Act (ACJA), 2015:

The ACJA is the primary legislation for criminal trials in federal courts and some states. It introduces modern provisions to ensure speedy and fair trials. Section 306 discourages unnecessary delays, while Section 353 addresses when a new trial may be ordered if a judge or magistrate cannot complete a case.

Civil Procedure

Rules of Civil Procedure (varied by jurisdiction):

High Court Civil Procedure Rules applicable in different states often provide for retrials where there are irregularities, improper service, or procedural lapses in the original trial.

Order for a New Trial:

A trial de novo may be ordered by appellate courts, such as the Court of Appeal or Supreme Court, when they find errors in the original trial that fundamentally affects the outcome.

Appellate Court Powers

The appellate courts (e.g., the Court of Appeal and Supreme Court) have the discretion to order a trial de novo if they believe that justice was not served in the original trial due to: Lack of jurisdiction by the lower court, Substantial procedural irregularities, Evidence not properly admitted or considered. Section 15 empowers the Court of Appeal to order a retrial where necessary to achieve substantial justice.

Judicial Precedents

Nigerian courts have consistently held that a trial de novo is necessary when justice demands it. For example. In Okoduwa v. The State the Supreme Court emphasized the importance of retrials when a trial has been improperly conducted. Also, in Adebayo v. Attorney-General, Ogun State, the court highlighted that a retrial should not be ordered where it would cause undue hardship or prejudice to any party.

Practical Considerations

A trial de novo is usually discouraged unless absolutely necessary, as it may lead to delays and increased costs. Courts are cautious in ordering a retrial to avoid abuse of judicial processes. The principle of double jeopardy also limits the scope for retrials in criminal cases. In conclusion, trial de novo in Nigeria is grounded in statutory, constitutional, and case law principles aimed at ensuring fair trials and justice. However, its application is not carefully managed to balance the interests of justice and judicial efficiency as it ought to be.

Effect of trial de Novo

The principle of de novo has been the greatest challenge in the judicial system which has attracted series of condemnation from all stakeholders within the judicial system; this is because it has accumulated good number of case files in court which are begging for attention. For example, old files which are supposed to be done and dusted are still in the midst of the new files which seem to take the attention of the Court than the new cases. De novo causes judicial traffic jam and in turn brings delay to the new cases which are expected to be dispensed within a reasonable time.

In Nigeria, the volume of cases before the courts are over-whelming, even if the judge will work for seven more years on the old files, will not exhausted them and that makes it difficult for the courts to clear the back logs, and this is caused by statute that established or Rules guiding the court, section 23 of the Act provides that where a judge is retired or transferred to another division and having part-heard a matter which is been re-heard de novo by another judge the record of proceeding of previous judge can be read without the witness who has given it been re-called. This position seems to be a radical departure from the principle of de novo but however the section provides that unless if the party or the witness cannot be found. Section 21 of the same Act is the same with section 23, however section 58 of the same Act provides that a high court judge and all businesses arising before him shall be tried, heard and disposed by him, that is to say the section is in support of trial de novo. Trial de novo has also

received the backing of judicial authority, in a plethora of cases; the courts have maintained their position in line with the principle of de novo. In EFCC v. Orji Uzo Kalu where the court held that it is now a settled legal consequence that generally upon the retirement, resignation, elevation, demise and even the transfer of judicial officer from one division to another automatically brings the matter afresh. By the doctrine of judicial precedence, the decisions of the higher courts are bound on the lower courts in terms of similar facts; this signifies that there shall be no derogation by the lower courts when it comes to de novo. When the substantive judge assumes the matter afresh and that is to say it has to be re-mentioned, evidences have to be re-heard and exhibits have to be re-tendered before the judgment can be delivered by the court, if not however no matter how brilliantly the judgment was delivered, it will amount to an exercise in futility.

The effect of trial de novo has affected the legal profession itself, the Constitution provides that the primary function of the judiciary is to interpret documents to give their literal meaning. That means the succeeding judge should be competent enough to take charge of the records prepared by his predecessor by reading and evaluating them rightly without getting firsthand information from the witnesses and their parties. The doctrine of trial de novo has caused parties to spend their resources on a matter that ought to have been dispensed without delay, but the same matter will re-appear as a result of the absence of the formal judge. This has caused un-told hardship on the parties and loss of confidence in the judicial system entirely. Trial de novo has caused cases to outweigh the life span of the parties therefore causing the cases to suffer set back; this makes lawyers to bring application for substitution of parties on ground of death.

The case in point, which is ongoing, is the un-reported case of Bulus & 2 ors V Hon Halilu Elayo & 2ors. The High court of Nasarawa state Akwanga Judicial Division. This case is a victim of trial de novo, the case was filed in 2006 for declaration of title to land by the plaintiffs against the defendants and since then witnesses are yet to be taken due to the fact that all previous Judges only part-heard the matter, but yet cut-off with transfer to other courts thereby keeping the matter on merry-go-round. There are those who misconstrue trial de novo with fair trial. Trial de novo simply means let the matter go afresh. While fair trial on the other hand means all parties are giving opportunity to be heard. Some are of the view that if the matter continues from where the previous judge stopped, it will amount to denial of fair hearing on the parties, but this work is of contrary view that trial de novo only comes when parties are giving opportunity to be heard again. Un-like fair hearing the parties were totally denied opportunity to be heard which is at variance with the Constitution; while refusal for de novo trial will not be contravening the Constitution. Instead, de novo will rather contradict the doctrine of reasonable time provided by the Constitution, because most of the trials are resolved at the un-reasonable time due to trial de novo. It is the view of this work that both the National Assembly and State House of Assembly take steps to amend all related laws that are in favour of trial de novo in order to allow speedy dispensation of justice.

The doctrine of trial de novo amounts to energy wasted especially when a judge has put in so much legal industry in compiling his records and all of a sudden, the records

by virtue of his absence becomes obsolete just because the law believes that his successor cannot fit-in the gap and that brings the case afresh. The doctrine therefore, has taken advantage of lack of time limit provided by law and that is why court can declare matters de novo because the laws did not provide time line for the trial to finish.

The absence legal framework puts the conclusion of some cases at the mercy of the Chief Judge of Federation or State because the CJ decides how long a judge may spend in a particular division. The law makers have the sole duty to arrest the situation because the issue of de novo is some time politically motivated by some judicial officers. Corruption has also adulterated the judicial system that is why this research calls for a cue to be taken from the Ugandan parliaments who have laid the issue of de novo to rest by enacting Laws repealing trial de novo. Rule as held by High Court of Uganda in Adam Mugga V. Valerian Kiwanuka Nabukeera & Anor. Where His Lordship in his estimation said, the facts of the case as presented then, would not merit de novo proceedings. I was thereby mandated under Order 18 r. 11 (1) to proceed with hearing of evidence from the stage at which, my predecessor left it.

Although the doctrine of trial de novo is anchored on the belief that seeing is believing, it is said that a judge who saw the witnesses testifying live before him and how they respond to questions stands a better chance to properly evaluate to give probative value and attach weight to the evidence. Therefore, de novo allows the new judge these opportunities at a trial. But one of the sets back to de novo is the lack of availability of witnesses who gave their testimony before the previous quorum, may not be available to testify before the new quorum. Another challenge to trial de novo is the inconsistency of the evidence of the witness whose former testimony was already before the court hence, destroying the case of their party. Death is a natural phenomenon which every soul must taste, it is common that witnesses die, change their minds or relocate to another place; this makes it difficult for court to compel their appearance which makes the present record of proceeding inconsistent with the previous one. Parties to the case may get weary on the nature of the trial and decide to abandon or forgive each other and that ends the case because of what they consider an endless trial. Some witnesses may become too old and their memory fade away to be able to recollect what they said before the previous quorum and to be able to repeat before the present quorum, they easily get confused and contradict themselves because memory has been lost.

In cases where expert witnesses are called for instance medical personnel, the doctor may have been transferred or retired from work place, will make it difficult for the matter to effectively continue as it was at the previous quorum. If a matter involves a surveyor, he might have also died or migrated for greener pasture elsewhere, the party who called him may not be aware of his whereabouts and that technically becomes detrimental to him. If a Bank was subpoenaed at the previous quorum to testify or to tender document and the same bank is to be subpoenaed before the present quorum such bank could have been wound-up or liquidated, this will become a big challenge to the present judge to put the record straight.

Most of the time witnesses do complain of loss of time, money and energy to appear

before a proceeding that is always characterised by incessant adjournments, holidays, strikes or trial de novo and end up refusing to honour the invitation to come to court to testify afresh. Witnesses to be sponsored by the state to appear in court do not often get sponsorship and therefore refused to come. Sometimes the state will leave the witnesses at the mercy of the nominal complainant to finance or transport their coming to court. It is in the interest of the State that litigation should be dispensed with in good time because it is expensive both to the State and the parties. The state has all the resources to ensure that matters are dispensed within time, but because of these delays, parties take advantage of it to resort to ADR instead of waiting for the matter to be mentioned de novo.

Conclusion

The paper critically analysed the doctrine of trial de novo and observed its merits and demerits. It is clear from the review of this work that the demerits outweigh the merits and it is on this premise that the work calls in strong terms that de novo trial be abolished both in criminal and civil cases, because its presence is a colossal loss both to the Judiciary and litigants. The litigants normally bear the risk as they come to the court seeking for justice. The interest of justice should be considered paramount both in policy and in legislation, the work calls for the legislators to borrow a leave from other jurisdictions like Uganda which has repealed trial de novo to enhance speedy justice system that will boost the confidence of the Ugandans.

Recommendations

The essence of the research is to proffer solutions to the existing problem, the research has carefully looked at some isolated problems associated with trial de novo by attempting to resolve them through recommendations.

The research recommends that judges who are elevated to High Court or Court of Appeal and have part-heard matters before elevation should be allowed by law to complete their part-heard cases before assuming their new offices.

Nigeria must take a clue from other jurisdictions such as Uganda, Kenya, India who have taken bold legislative step to repeal trial de novo to mandate a substantive judge to continue with the cases using records of proceeding.

Abolition of trial de novo will also restore the reputation of judges and place judicial arm in its right standard for interpretation as provided for under the Constitution, irrespective of whether it is documentary or oral interpretation. This will also make judges to sit up as they can be confronted with any task before them.

For abolition of trial de novo to be achieved the paper recommends for training and retraining of judicial officers to be up-to-date with current trends on judicial matters which includes reading of records of proceedings and evaluate them. Trial de novo attracts additional transportation risk, money time wasting, and long conflicts; therefore it is in the interest of parties that matter should be continued by the present judge who has all the judicial resources before him to dispense justice swiftly.

Abolition of trial de novo will preserve justice for litigants who have come for fast delivery of justice, for instance, commercial litigants who will want their matter dispensed swiftly will be happy to hear that trial de novo have been abolished. Students who have gone to court to challenge administrative decision against them will get their justice right on time and resume their studies with their mates in class without delay.

The paper is of the view that de novo trial should be allowed in exceptional cases by the appellate court. The paper recommended that there should be a law restricting the CJ from transferring a judge from one division to another except he has served in that particular jurisdiction for 4 years.

Challenges faced by Physics Teachers in the Implementation of Senior Secondary School Physics Curriculum in Kafanchan Municipal, Kaduna State, Nigeria

Education

1Nuhu Yohanna Abot; 2Isa Shehu Usman & 3Mangut Mankilik

Department of Physics,

Kaduna State College of Education Gidan Waya

PMB 1024 Kafanchan

2&3Department of Science and Technology Education,

University of Jos, Plateau State Nigeria

Corresponding Email: nuhuabot gmail.com Phone: +2348036087184

Abstract:

The study evaluates the implementation of senior secondary school Physics Curriculum in Kafanchan Municipal, Kaduna State, Nigeria. The study adopted Evaluation and Descriptive Survey Research Designs. The Population for this study comprised of physics teachers and SS 3 Students offering physics in Kafanchan Municipal, Kaduna State. Multistage sampling procedure was used to sampled 20 physics teachers and 50 SS 3 Students offering physics for the study. A researcher instruments named Teachers'

Evaluation of Physics Curriculum Implementation Questionnaire (TEPCIQ), Students' Evaluation of Physics Curriculum Implementation Questionnaire (SEPCIQ) and Physics Resources Observation Checklist (PROCL) were used for data collection. A five-point Likert scale ranging from strongly agree (SA) to strongly disagree (SD) with a grand mean score of 3.0 was used to determine the threshold of the instruments. The instruments were validated by five experts. Split-half reliability method was used and the reliability coefficients of 0.85 and 0.89 were obtained for TEPCIQ and SEPCIQ respectively. The reliability of PROCL was ascertained using interrater method and a reliability index of 0.93 was obtained. Data were analyzed using percentages, frequency, descriptive statistics (mean and standard deviation) and inferential statistics (independent samples t-test and ANOVA). The findings show that there is a significant difference between the mean responses of male and female teachers on the compliance by physics teachers on the recommended teaching methods for effective physics curriculum implementation in senior secondary schools. Furthermore, there is no significant difference between the extent of content coverage of physics curriculum by physics teachers and students offering physics in senior secondary school. Consequently, students' performance in physics could be influenced through proper evaluation of physics curriculum implementation by both the physics teachers and students offering physics. In conclusion, there should be a workshop organized for physics teachers on the recommended teaching methods for effective physics curriculum implementation in our senior secondary schools.

Introduction:

The development of a nation depends solely on its level of skills in science and technology. The knowledge of science and technology, with its applications, made some countries like China to stand out economically among the comity of nations. Therefore, the need for Nigeria to advance scientifically and technologically cannot be overemphasized. To get this realized, emphasis can be laid on the implementation of the concepts of science curriculum generally and physics curriculum in particular, in order to enhance national development. Furthermore, the curriculum for science subjects in Nigerian schools are properly designed and developed with clear objectives stated at every Education level in its National policy on Education. The implementation stakeholders are properly identified and prepared materials and strategies are clearly stated for smooth implementation (FRN,2014). In Nigeria, Physics is taught as one of the science subjects at the senior secondary school level of education. Taofeeg, Gana, Gimba and Salako (2022) viewed physics as the natural science that involves the study of matter and its motion and behaviour through space and time, along with related concepts such as energy and force. This simply mean that the knowledge of physics is relevant and applicable to every aspect of human endeavour.

Physics is an area of study that is absolutely necessary for the development of science, technology and industry. This is because Scientific development is essential for better quality of life, sustainable development of the planet, and peaceful coexistence among

people (Omwirhiren, 2015). The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2015), further opined that from the immediate basic essentials of life such as access to water, food and shelter, to other issues such as management of agricultural production, water resources, health, energy resources, biodiversity, conservation, environment, transport and communication physics provides the basis for action at local, regional, national and transnational levels. The submissions of the researchers above are a testament to the fact that physics plays a significant role in human existence. Physics have been identified as the key driver for growth and sustainable social development and transformation of nations, which could lead to industrialization.

Physics is the bedrock of scientific and technological development worldwide, in view of its contribution globally. For the proper understanding of technical and indeed technology subjects, physics plays a major role. Physics is in fact "science in action" as it focuses on everyday life and has its clear application in the likes of sports and medicine. The increasing importance and attention given to physics stem from Busari's (2014) view that without physics, there is no science and there is no modern society. In other words, physics is the soul of technology and an indispensable single element in modern societal development. Physics is applied to almost every human activity, and virtually every profession involves some element of physics. The knowledge of physics can be achieved through physics education. Physics Education aims at helping individual learners to gain functional understanding of scientific concepts and principles linked with real life situations and to acquire scientific skills, attitudes and values necessary to analyze and solve day-to-day problems.

The development of a nation also depends on the kind of education the nation puts in place for its citizens. The needs and values of a nation determine its educational policy; hence, the Federal Republic of Nigeria, FRN (2014) pointed out that there is the need to train Nigerian citizens to be able to manipulate their environment towards the development of the nation. There is no gain saying that quality education increases the productivity and potentials of individuals and by extension, the society. It is one thing to design and develop a curriculum for a programme and it is another to ensure effective monitoring and evaluation of the implementation of it by stakeholders in order to identify areas that need adjustment for effective achievement of the purpose of its development. Curriculum is a means of bringing the objectives of education into reality. In addition, mastery of any subject is determined by the method used in implementing the curriculum. The evaluation procedure put in place after the implementation and the students' response is expected to yield effective learning outcomes in the students. When the curriculum is faulty or not well-implemented, it may affect the purpose of the national policy on education. The objectives of any level of education cannot be achieved if the planned curriculum for such level of education is not well- implemented. Adebule and Akomolafe (2014) concurred that no matter how well the curriculum of any subject is planned, designed and documented, if not properly implemented the curriculum may not achieve its goal and objectives.

In Nigeria, secondary school curriculum is designed to encourage all students to

achieve their spiritual, intellectual and social potential as well as to understand the relevance of learning in their daily lives (Taofeeq et.al., 2022). It is one thing to design a curriculum, and it is another thing to implement it effectively. Ali and Ajibola (2015) defined curriculum as the planned experiences provided by the school to assist students in attaining the designated learning outcomes in the different school subjects. One dimension of curriculum is that the learning of content may not result in achieving objectives if both contents and objectives are not closely related. The achievement of the objectives is partly determined in terms of how well the curriculum is implemented. The implementation of the curriculum is the aspect that concerns the nature and scope of classroom teacher and evaluation of learning achieved by learners who are being taught. Specifically, the process of curriculum implementation entails interaction between the curriculum planner, the teacher, the learners and the learning environment. The teacher is the major implementer of the curriculum since what the teacher does with it in the classroom determines whether the set goals would be achieved or not.

The implementation of curriculum is facing some challenges in Nigerian secondary schools. Ayandele (2021) opines that one of which is the lack of teachers' participation in decision making and curriculum planning. Danbatta (2015) earlier mentioned that teachers are not involved in curriculum planning which could make or mar curriculum implementation, since the responsibility of interpreting and putting the curriculum into use solely rests on the teacher. Moreover, the issue of policy changes in the educational system over the years, which started with the 6-5-4 system, 6-3-3-4 system and now the 9-3-4 system has confused learners as to which subjects are to be offered in certificate examinations; with the changes in subjects offered at certificate examination as a result of the changes in educational system policy. In this study, implementation means the teaching of physics curriculum content to secondary school students from senior secondary one to three. There are different frameworks used in evaluating curriculum implementation, one of which is the Tyler's model.

Tyler's model, a goal-attainment model, sometimes called the objectives-centered model is the basis for most common models in curriculum design, development and evaluation. The Tyler model comprises four major parts: Defining objectives of the learning activities, identifying learning activities for meeting the defined objectives, organizing the learning activities for attaining the defined objectives, and evaluating and assessing the learning experiences. The first part which is defining objectives of the learning activities simply means stating the aims and objectives of the programme based on the respective philosophy of education, the second which is identifying learning activities for meeting the defined objectives means selecting the content or subject matter to help learners achieve the objectives, the third which is organizing the learning activities for attaining the defined objectives means deciding on the method to organize and present the content and the fourth which is evaluating and assessing the learning experiences means determining the method to measure the extent objectives are achieved. Gender could be a moderator variable in effective implementation of physics curriculum by secondary school physics teachers.

Gender is defined by Adolphus and Mumuni (2016) as those characteristics of male and female, which are socially determined in contrast to those which are biologically determined. What this means is that gender roles for men and women vary from culture to culture; and even within the same culture, from one social group to another. Gender is used to discuss social and psychological respects that are regarded appropriate to men and women. Gender could influence curriculum implementation if there are topics that are gender-bias. According to a study conducted by Taofeeg et.al. (2022), there was a significant difference observed in the syllabus coverage and organization of physics curriculum implementation by physics teachers based on gender in favour of the males. The study also showed that there are some topics in the senior secondary school physics curriculum which are gender bias. On the contrary, a study conducted by Adebule, Ayodele and Akomolafe (2023) showed that there is no significant difference observed in the syllabus coverage and organization of physics curriculum implementation by physics teachers based on gender. Another moderator variable that could influence the adequate implementation of senior secondary physics curriculum is teacher's years of teaching experience.

Teacher's years of experience have to do with the increased awareness of diversifying search for new ideas, new commitments and new challenges. It is important to note that experience gained over time, enhances the knowledge, skills, and productivity of teachers. Oluwadare and Gana (2020) were of the view that a teacher is considered to have sufficient teaching experience after engaging in the teaching and learning process for a period of 10 years. This is so because as the saying goes, 'practice makes perfect'. Another moderator variable which could have impact on the implementation of physics curriculum in senior secondary schools is school type.

Secondary schools in Nigeria are categorized into two types, namely public and private schools. Public schools are schools owned by government (either Federal or State) whereas private schools are schools owned by organisations and individuals that are non-governmental. These type of school also includes Missionary schools and Islamic schools. The academic activities of public schools are strictly monitored or supervised by government agencies such as quality assurance unit/department in the ministries of education while private schools' academic activities are monitored or supervised mostly by their proprietors and occasionally by government agencies. Students are the most important stakeholders in the teaching and learning process. Therefore, for effective evaluation of physics curriculum implementation, the perception of students offering physics on the relevance of the physics curriculum to real-world applications, is very important. Student-factor is very crucial in curriculum implementation process and therefore it is necessary to also use students in evaluating the extent of curriculum coverage by their teachers. Teaching methods (pedagogy)used by teachers in physics curriculum implementation is also key to achieving the objectives of the curriculum. Inquiry-Based/Guided-discovery Teaching method is used to describe teaching strategies that are driven by scientific inquiry. The approach is deeply rooted in constructivism teaching practices. It is student-centered and offers students opportunities to be actively involved in experimenting, questioning and investigating. 'Inquiry' refers to an intellectual process through which students develop understanding

of science ideas and the ways in which scientists study the natural world through actively engaging with scientific questions and investigations (Zheng & Geelan, 2015). Instructional materials are also very important factor in the effective implementation of physics curriculum. In the absence of teaching and learning materials, the teaching-learning processes will be hampered and if standard officers do not go out to evaluate, it will be difficult to know whether the curriculum is being effectively implemented or not. Unavailability of school facilities and equipment's like classrooms, libraries, resource centers, offices, desks, school halls and others. The fact that education is under-funded by the government means that the availability and quality of facilities in learning institutions is affected negatively.

Students' ability to acquire scientific knowledge which can be applied in real-world is vital to effective physics curriculum implementation. The most important focus of physics education is to prepare students to acquire scientific knowledge that they will apply in everyday life (UNESCO, 2015). This implies that physics teaching ought not just to convey collection of facts to the students but also a way to think about the world outside the classroom. Therefore, teaching physics has to be concerned with developing analytical, critical observation and problem solving abilities as well as the creativity of an individual. To promote deep understanding of scientific concepts and positive attitudes towards science, it is recommended that physics teaching and learning should be focused on the use of scientific activities to investigate real-life phenomena (Hofstein & Mamlok, 2016). Physics is an experimental subject, thus its teaching and learning becomes more effective when students are given opportunity to develop their own idea through science learning activities. When the physics curriculum is not properly implemented in senior secondary schools, the goal of formulating such curriculum will not be achieved. It is on the basis of the aforementioned issues, that the researcher evaluated the implementation of Senior Secondary School Physics Curriculum in Kafanchan Municipal, Kaduna State, Nigeria.

Statement of the Problem

Over the past ten years (2015-2024), the poor performance of students in Physics have been a general problem. Evidence have shown that students are not doing well in this subject at West African Examinations Council (WAEC,2015-2024) and National Examinations Council (NECO,2015-2024). There are possible factors which could be responsible for students' poor performance in physics some of which Ogunleye (2015) opined as overloaded curriculum, uneven distribution of curriculum content, difficult nature of physics concepts, lack of competent physics teachers and non-functional physics curriculum. Furthermore, studies by Wafula (2019) and Adolphus (2020) also identified low learners' motivation among students, inadequate teaching and learning materials, and limited learning activities in Physics classrooms as well as poor syllabus coverage (ineffective implementation of physics curriculum) as possible factors responsible for the poor performance of students. If this problem persists, students will not be able to get admission into higher institutions to study courses like Engineering, Medicine, Pharmacy and other critical disciplines which are needed for national development.

Therefore, there is need to evaluate the implementation of the senior secondary school physics curriculum in its entirety and to what extent has the implementation of the physics curriculum succeeded in achieving the set objectives of physics education, with regards to achieving aims and objectives, content coverage, teachers' utilization of the available input factors, level of compliance of teachers with the recommended instructional methods and evaluation techniques used by physics teachers among others in assessing their students. There appears to be inadequate evaluation procedure put in place to ascertain whether the senior secondary school physics curriculum is being implemented the way it should be or not. Hence, this study addressed the fundamental question: To what extent do physics teachers comply to the objectives of physics curriculum in its implementation?

Aim and Objectives of the Study

Challenges faced by Physics Teachers in the Implementation of Senior Secondary School Physics Curriculum in Kafanchan Municipal, Kaduna State, Nigeria.

Education

Specifically, the study sought to achieve the following objectives:

- 1. -f-æB ÷WB F†R 6† ÆÆVævW2 `aced by physics teachers in implementing the physics curriculum effectively.
- 2. —àvestigate students offering physics perception of the relevance of the physics curriculum to real-world applications.
- 3. 66W tain the resources available to physics teachers that influence the implementation of the physics curriculum based on school type.
- 4. -76W72 F†R actice in physics classrooms with the intended learning outcomes of the physics curriculum based on school type.

Research Questions

The following research questions were raised to guide the study:

- 1. •v† B &R F†R 6† ÆÆVævW2 `aced by secondary school physics teachers in implementing the physics curriculum effectively?
- 2. •v† B —2 6V6öæF y school students offering physics perception of the relevance of the physics curriculum to real-world applications?
- 3. •v† B &R F†R &W6÷W&6W2 vailable to secondary school physics teachers that influence the implementation of the physics curriculum based on school type?

4. •v† B —2 F†R 76W76ÖVçB actice in secondary school physics classrooms in relation with the intended learning outcomes of the physics curriculum based on school type?

•

Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance:

- 1.•F†W&R —2 æò 6–væ–f–6 çB F–f`erence in the compliance by physics teachers on the recommended teaching methods in senior secondary schools based on gender.
- 2. •F†W&R —2 æò 6–væ–f–6 çB F–f`erence in the compliance by physics teachers on the recommended teaching methods in senior secondary schools based on school type.
- 3. •F†W&R —2 æò 6–væ–f–6 çB F–f`erence between the extent of content coverage of physics curriculum by physics teachers and students offering physics in senior secondary schools.

Method and Procedure

The study adopted Evaluation and Descriptive Survey Research Designs. The sample of this study consisted of 70 respondents comprising of 20 physics teachers and 50 SS3 students offering physics in Kafanchan Municipal, Kaduna State, Nigeria. This was achieved using Krejcie and Morgan (1970) sample size determination table. This method gave each member of the population an equal chance of being represented. Multistage sampling techniques was used. Three instruments were used for data collection. The first instrument is "Teachers' Evaluation of Physics Curriculum" Implementation Questionnaire" (TEPCIQ). The second instrument is "Students' Evaluation of Physics Curriculum Implementation Questionnaire" (SEPCIQ) and the third instrument is a checklist (PROCL). The TEPCIQ and SEPCIQ were structured based on a five-points Likert Scale of Strongly Agree(SA), Agree(A), Undecided(U), Disagree(D) and Strongly Disagree(SD). It was assigned value points of 5,4,3,2,1 respectively for positive statements and 1,2,3,4,5 for negative statements. The scoring of the instruments was based on value points assigned to each of the five-points Likert Scale of Strongly Agree(SA)-5points, Agree (A)-4points, Undecided(U)-3points, Disagree(D)-2points and Strongly Disagree(SD)-1point. The minimum point was 1 while the maximum point 5. Content validity of TEPCIQ and SEPCIQ was carried out by five experts; one from the Department of Science and Technology Education University of Jos, one from Research, Measurement and Evaluation Unit, Department of Educational Foundations University of Jos, one from Curriculum Studies Unit, Department of Science and Technology Education University of Jos, one from the School of Secondary Education; Science Programmes, Kaduna State College of Education Gidan waya and one from Senior Secondary Schools in Kafanchan Municipal Kaduna State.

The construct validity of the instruments (TEPCIQ and SEPCIQ) was established through factor analysis method. To establish the internal consistency of TEPCIQ and SEPCIQ, Split-half reliability method was used. Where the instruments were administered once and the scores obtained were computed and reliability coefficients of 0.85 and 0.89 were obtained, which is reliable. The reliability of the checklist (PROCL) was ascertained using interrater method and data collected was computed using Cohen kappa statistics and a reliability index of 0.93 was obtained. Data were analyzed using percentages, frequency, descriptive statistics (mean and standard deviation) and inferential statistics (independent samples t-test and ANOVA). Descriptive statistics of mean and standard deviation were used to answer Research Questions 1, 2, 3 & 4. Hypotheses 1, 2 & 3 were tested using t-test at 0.05 level of significance. A grand mean score of 3.0 was used to determine the decision mean of each section of the questionnaires.

RESULTS

Research Question one

What are the challenges faced by secondary school physics teachers in implementing the physics curriculum effectively?

| Table 1 |
|--|
| Challenges Faced by Secondary School Physics Teachers in Implementing the Physics Curriculum Effectively |
| S/N |
| Statements |
| SA |
| A |
| U |
| D |
| SD |
| N |
| Mean |
| Std. |
| Decision |
| 1 |
| The number of periods assigned for physics in a week is not enough for me |

to teach the syllabus.

| 4 |
|---|
| - |
| 4 |
| - |
| 20 |
| 4.20 |
| 1.196 |
| Agree |
| 2 |
| The curriculum contains extra topics not taught when I was in senior secondary school |
| |
| 4 |
| 4 |
| 4 |
| 8 |
| - |
| 20 |
| 3.20 |
| 1.196 |
| Agree |
| 3 |
| I face challenges in the effective implementation |
| of the current curriculum. |

| 8 |
|---|
| 4 |
| - |
| 8 |
| - |
| 20 |
| 3.60 |
| 1.392 |
| Agree |
| 4 |
| I cannot teach all physics topics very well |
| |
| |
| - |
| - 8 |
| - 8 - |
| - 8 - 4 |
| - |
| - 4 |
| - 4 8 |
| - 4 8 20 |
| - 4 8 20 2.40 |

| 16 |
|--|
| 4 |
| - |
| - |
| - |
| 20 |
| 4.80 |
| .410 |
| Agree |
| 6 |
| I cannot improvise materials for the physics practical |
| |
| - |
| |
| 8 |
| 8 |
| |
| 8 |
| 8 4 |
| 8 4 - |
| 84-20 |

Textbooks that will be more explanatory to the average student should be made available

| 7 |
|---|
| I cannot cover the curriculum content of physics within the stipulated prescribed in the syllabus |
| |
| 4 |
| 12 |
| - |
| 4 |
| - |
| 20 |
| 3.80 |
| 1.005 |
| Agree |
| 8 |
| I do not have a good knowledge of the current physics curriculum |
| |
| - |
| 4 |
| - |
| 12 |

4

20

2.20

period of time as

| 1.005 |
|---|
| Disagree |
| 9 |
| Challenges faced by me in the implementation of the physics curriculum can be addressed by government and other relevant stakeholders |
| |
| 8 |
| 4 |
| 4 |
| 4 |
| - |
| 20 |
| 3.80 |
| 1.196 |
| Agree |
| 10 |
| My teaching qualification influences physics curriculum implementation in my senior secondary school |
| 8 |
| 8 |
| - |
| 4 |
| |

4.00

1.124

Agree

Grand Mean

3.52

Agree

Table 1 shows the result on the challenges faced by secondary school physics teachers in implementing the physics curriculum effectively. From the table items 1, 2, 3,5, 6, 7, 9 and 10 were rated agree with mean scores ranging between 3.20 and 4.80, indicating that the respondents agree with the statements which says 'the number of periods assigned for physics in a week is not enough for me to teach the syllabus', "The curriculum contains extra topics not taught when I was in senior secondary school", "I face challenges in the effective implementation of the current curriculum", "Textbooks that will be more explanatory to the average student should be made available", "I cannot improvise materials for the physics practical", "I cannot cover the curriculum content of physics within the stipulated period of time as prescribed in the syllabus", "Challenges faced by teachers in the implementation of the physics curriculum can be addressed by government and other relevant stakeholders", and that "teaching qualification influences physics curriculum implementation in senior secondary school". Items 4 and 8 were rated disagree, indicating that teachers disagree to the statements which says "I cannot teach all physics topics very well ", and "I do not have a good knowledge of the current physics curriculum". Since the grand mean is above the criterion mean of 3.00, it implies that the aforementioned are challenges faced by physics teachers in the implementation of physics curriculum.

Research Question two

4

| What is secondary school students offering physics perception of the relevance of the | е |
|---|---|
| physics curriculum to real-world applications? | |

| physics curriculum to real-world applications? |
|---|
| Table 2 |
| Secondary School Students Perception of the Relevance of Physics Curriculum to Real world Application |
| S/N |
| Statements |
| SA |
| A |
| U |
| D |
| SD |
| N |
| Mean |
| Std. |
| Decision |
| 1 |
| The content of the current physics curriculum does not address contemporary issues in my community. |
| 8 |
| 8 |
| - |

| - |
|---|
| 20 |
| 2.80 |
| 1.19 |
| Disagree |
| 2 |
| All the topics in the curriculum can be applied to everyday living and real-world. |
| 8 |
| 12 |
| |
| |
| |
| 20 |
| 4.40 |
| .503 |
| Agree |
| 3 |
| I do incorporate guided discovery teaching method in the teaching-learning process. |
| 8 |
| 8 |
| 8 |
| |

| 20 |
|---|
| 4.20 |
| .768 |
| Agree |
| 4 |
| Senior secondary school students offering physics have an understanding of the relevance of physics curriculum. |
| 4 |
| 8 |
| 8 |
| |
| |
| 20 |
| 3.80 |
| .768 |
| Agree |
| 5 |
| Students offering physics can apply physics knowledge to explain the phenomenon of rainbow. |
| 8 |
| 12 |
| |

| 20 |
|--|
| 4.40 |
| .503 |
| Disagree |
| 8 |
| Physics curriculum helps students to apply the knowledge of physics in real-world/ |
| 8 |
| 12 |
| |
| |
| |
| 20 |
| 4.40 |
| .503 |
| Diagree |
| 9 |
| Physics curriculum content enables students to address contemporary issues. |

| 4.20 |
|---|
| .410 |
| Agree |
| 10 |
| One of the most well-known applications of physics in the real life world is in the area of technology. |
| 16 |
| 4 |
| |
| |
| |
| 20 |
| 4.80 |
| .410 |
| Agree |
| |
| Grand Mean |

Agree

Table 2 shows the result on the perception of secondary school students on the relevance of the physics curriculum to real-world applications. From the result, items 2, 3, 4, 5, 6, 7, 8, 9, and 10 were rated agree with mean scores ranging from 3.80 to 4.80, it means that students agree that all the topics in the curriculum can be applied to everyday living and real-world, teachers do incorporate guided discovery teaching method in the teaching-learning process, Senior secondary school students offering physics have an understanding of the relevance of physics curriculum, Students offering physics can apply physics knowledge to explain the phenomenon of rainbow and that the understanding of physics concepts enhances students interaction with the environment. It was further discovered that real-world applications of physics help students in unlocking the secrets of the universe. Item one has mean score of 2.80 below the criterion mean, indicating that teachers disagree with the statement which says "the content of the current physics curriculum does not address contemporary issues in my community". Since the grand mean of 4.2 is above the criterion mean of 3.00, it implies that physics curriculum is relevant to real world applications.

Research Question three

What are the resources available to secondary school physics teachers that influence the implementation of the physics curriculum?

Table 3 Resources Available to Secondary School Physics Teachers that Influence the Implementation of the Physics Curriculum S/N Resources

| Text books | |
|------------|--|
| 10 | |
| 100 | |
| - | |
| - | |
| | |
| 2 | |
| Television | |
| 8 | |
| 80 | |
| 2 | |
| 20 | |
| | |
| 3 | |
| Novels | |
| 3 | |
| 30 | |
| | |

Available

Not available

%

%

1

Total

| 7 |
|------------------|
| 70 |
| |
| 4 |
| Film |
| 4 |
| 40 |
| 6 |
| 60 |
| |
| 5 |
| Radio programmes |
| 4 |
| 40 |
| 6 |
| 60 |
| |
| 6 |
| Podcast |
| 3 |
| 30 |
| 7 |

Multimedia

Applications

Software

_

_

| 11. |
|--------------|
| Games |
| 2 |
| 20 |
| 8 |
| 80 |
| |
| 12. |
| Social media |
| 1 |
| 10 |
| 9 |
| 90 |
| |
| 13. |
| Video |
| 6 |
| |

Platforms

| 60 |
|----------|
| 4 |
| 40 |
| |
| 14. |
| Audio |
| 7 |
| 70 |
| 3 |
| 30 |
| |
| 15. |
| Websites |
| 2 |
| 20 |
| 8 |

Animation

17.

Images

18.

Resistor

19.

Rheostat

| 60 | |
|--------------|--|
| | |
| 21. | |
| Voltmeter | |
| 8 | |
| 80 | |
| 2 | |
| 20 | |
| | |
| 22. | |
| Ammeter | |
| 7 | |
| 70 | |
| 3 | |
| 30 | |
| | |
| 23. | |
| Galvanometer | |
| | |

4

40

6

Multimeter

| 8 |
|--------------------|
| 80 |
| 2 |
| 20 |
| |
| 24. |
| Potentiometer |
| 8 |
| 80 |
| 2 |
| 20 |
| |
| 25. |
| Battery eliminator |
| 4 |
| 40 |
| 6 |
| 60 |
| |
| 26. |
| Daniel cell |
| 8 |
| 80 |

| 2 |
|---------------------------------|
| 20 |
| |
| 27. |
| Le clanche cell |
| 8 |
| 80 |
| 2 |
| 20 |
| |
| 28. |
| Meter bridge with pencil jockey |
| 9 |
| 90 |
| 1 |
| 10 |
| |
| 29. |
| Ohm's law apparatus |
| 8 |
| 80 |
| 2 |
| 20 |

Compass

31.

Magnet

32.

Prism

33.

34. Mirror 35. Glass slap 36. Optical bench

Lens

| 80 |
|--------------------|
| 2 |
| 20 |
| |
| 37. |
| Pendulum bulb |
| 6 |
| 60 |
| 4 |
| 40 |
| |
| 38. |
| Sonometer |
| 8 |
| 80 |
| 2 |
| 20 |
| |
| 39. |
| Copper calorimeter |
| 10 |
| 100 |
| - |

| 40. | |
|-----------------|--|
| Thermometer | |
| 8 | |
| 80 | |
| 2 | |
| 20 | |
| | |
| 41. | |
| Vernier caliper | |
| 8 | |
| 80 | |
| 2 | |
| 20 | |
| | |

Screw gauge

10

100

_

_

| 43. |
|----------------------|
| Stop clock |
| 8 |
| 80 |
| 2 |
| 20 |
| |
| 44. |
| Tripple beam balance |
| 4 |
| 40 |
| 6 |
| 60 |
| |
| 45. |
| Digital balance |
| 3 |
| 30 |
| 7 |
| 70 |
| |
| 46. |
| Spherometer |

8

80

47.

Meter rule

3

30

7

70

Table 3 presents the results on resources available to secondary school physics teachers that influence the implementation of the physics curriculum. The available resources are textbooks, television, video, audio, animation, images, resistor, rheostat, voltmeter, ammeter, galvanometer, potentiometer, Daniel cell, le clanche cell, meter bridge with pencil jockey, ohms law apparatus, compass, magnet, prism, lens, mirror, glass slap, optical bench, pendulum bulb, sonometer, copper calorimeter, thermometer, Vernier caliper, srew guage and stop clock. It further reveals that novels, films, radio programmes, podcast, multimedia, application, software, platform, games, social media, websites, multimeter, battery eliminator, triple beam balance, digital balance, spherometer and meter rule are not available for use by teachers in the implementation of Physics curriculum.

Research Question four

What is the assessment practice in secondary school physics classrooms in relation with the intended learning outcomes of the physics curriculum?

Table 4

Assessment Practice in Secondary School Physics Classroom in Relation with the Intended Learning Outcomes in Physics Curriculum

| , |
|--|
| S/N |
| Statements |
| SA |
| A |
| U |
| D |
| SD |
| N |
| Mean |
| Std. |
| Decision |
| 1 |
| My assessment practice aligns with intended learning outcomes of the physics curriculum in senior secondary schools. |
| 4 |
| 16 |
| |
| |
| |
| 20 |
| 4.20 |
| .410 |

| Agree |
|---|
| 2 |
| Teaching methodology is very vital for effective physics curriculum implementation in senior secondary schools. |
| 12 |
| 8 |
| |
| |
| |
| 20 |
| 4.60 |
| .503 |
| Agree |
| 3 |
| Continues assessment test is always administered to students in my school every term. |
| 4 |
| 16 |
| |
| |
| |
| 20 |
| 4.20 |
| .410 |
| Agree |

| 4 |
|--|
| Assessment practice in classrooms aligns with the intended learning outcomes in secondary school physics. |
| 4 |
| 16 |
| |
| |
| |
| 20 |
| 4.20 |
| .410 |
| Agree |
| 5 |
| I do not adhere to the recommended methods of teaching for effective curriculum implementation in senior secondary schools |
| |
| 4 |
| 4 |
| 8 |
| 4 |
| 20 |
| 2.40 |
| 1.046 |
| Disagree |

| 6 |
|--|
| All my students understand the topics taught before proceeding to the next topic. |
| 16 |
| 4 |
| 20 |
| 3.60 |
| .821 |
| Agree |
| 7 |
| There are practical knowledge assessment procedure put in place by me for effective teaching-learning. |
| 4 |
| 12 |
| 4 |
| |
| |
| |
| 20 |
| |
| 20 |

| 8 |
|---|
| I give students assignment at the end of every lesson and also give them feedback. |
| 4 |
| 16 |
| |
| |
| |
| 20 |
| 4.20 |
| .410 |
| Agree |
| 9 |
| |
| I always give examinations to my students at the end of every term to evaluate their learning outcomes. |
| |
| learning outcomes. |
| learning outcomes. 12 |
| learning outcomes. 12 8 |
| learning outcomes. 12 8 |
| learning outcomes. 12 8 20 4.60 |

| Students are promoted or demoted at the end of every session based on their performance. |
|--|
| 12 |
| |
| 4 |
| 4 |
| |
| 20 |
| 3.40 |
| .821 |
| Agree |
| |
| Grand Mean |
| |
| |
| |
| |
| |
| |
| |
| 3.94 |
| |
| Agree |
| |

Table 4 shows the result on the assessment practices in secondary school physics classrooms in relation with the intended learning outcomes of the physics curriculum. Items1, 2, 3, 4, 6, 7, 8, 9 and 10 have mean scores above the criterion mean score of 3.00, it indicates that assessment practices aligns with intended learning outcomes of the physics curriculum in senior secondary schools, Teaching methodology is very vital for effective physics curriculum implementation in senior secondary schools, Continuous assessment test is always administered to students in school every term, that students understand the topics taught before proceeding to the next topic, There are practical knowledge assessment procedure put in place by teachers for effective teaching-learning, teachers give students assignment at the end of every lesson and also give them feedback, they always give examinations to students at the end of every term to evaluate their learning outcomes and that students are promoted or demoted at the end of every session based on their performance. Item 5 have mean score of 2.40 below the criterion score teachers disagree with the statement which says

"teachers do not adhere to the recommended methods of teaching for effective curriculum implementation in senior secondary schools". Since the grand mean of 3.94 is above the criterion mean, it implies that the assessment practices in secondary school physics classrooms is in relation with the intended learning outcomes of the physics curriculum.

Hypothesis One

There is no significant difference in the compliance by physics teachers on the recommended teaching methods in senior secondary schools based on gender.

Table 5

P-value

Summary of t-test Result on Compliance of Physics Teachers on the Recommended Teaching Methods Based on Gender

Groups

N

Mean

SD

Df

Decision

Male

8

69.00
.000
18

5.66
.000
Significant
Female
12
64.67
2.146
Source: Fieldwork, 2024

Table 5 presents the t-test result on the difference between the mean responses of teachers on the compliance by physics teachers on the recommended teaching methods in senior secondary schools based on gender. Male teachers have a mean score of 69.00 with a standard deviation of .000 and the female teachers had a mean score of 64.67 and a standard deviation of 2.15. The result further shows that t (18) = 5.66, P < 0.05. Since the P-value of 0.000 is less than the 0.05 level of significance, the null hypothesis was rejected. It was concluded that there is a significant difference between the mean responses of male and female teachers on the compliance by physics teachers on the recommended teaching methods in senior secondary schools.

Hypothesis Two

There is no significant difference in the compliance by physics teachers on the recommended teaching methods in senior secondary schools based on school type.

Table 6

Summary of t-test Result on Compliance of Physics Teachers on the Recommended Teaching Methods Based on School Type Groups Ν Mean SD Df Т P-value Decision **Public** 12 67.00 1.706 18 1.22 .237 Insignificant Private 8 65.50 3.742 Source: Fieldwork, 2024

Table 6 presents the t-test result on the difference between the mean responses of

teachers on the compliance by physics teachers on the recommended teaching methods in senior secondary schools based on school type. Public school teachers have a mean score of 67.00 with a standard deviation of 1.71 and the private school teachers had a mean score of 65.50 and a standard deviation of 3.74. The result further shows that t (18) = 1.22, P > 0.05. Since the P-value of 0.237 is greater than the 0.05 level of significance, the null hypothesis was retained. It was concluded that there is no significant difference between the mean responses of public and private school teachers on the compliance by physics teachers on the recommended teaching methods in senior secondary schools.

Hypothesis Three

There is no significant difference between the extent of content coverage of physics curriculum by physics teachers and students offering physics in senior secondary schools.

Table 7

Summary of t-test Result on Extent of Content Coverage of Physics Curriculum by Physics Teachers and Students Offering Physics in Senior Secondary Schools

| Group |
|----------|
| N |
| Mean |
| SD |
| Df |
| Т |
| P-value |
| Decision |
| Teachers |
| 20 |
| 125.00 |
| 13.87 |

.399

Insignificant

Students

50

121.96

13.40

Source: Fieldwork, 2024

Table 7 presents the t-test result on the extent of content coverage of physics curriculum by physics teachers and students offering physics in senior secondary school. Teachers have a mean score of 125.00 with a standard deviation of 13.87 and the students had a mean score of 121.96 and a standard deviation of 13.40. The result further shows that t (68) = 0.849, P > 0.05. Since the P-value of 0.399 is greater than the 0.05 level of significance, the null hypothesis was retained. It was concluded that there is no significant difference between the extent of content coverage of physics curriculum by physics teachers and students offering physics in senior secondary schools.

Summary of Findings

The unavailability of resources hinders effective implementation of senior secondary school physics curriculum.

Teaching methodology is very vital for effective physics curriculum implementation in senior secondary schools.

There is a significant difference between the mean responses of male and female teachers on the compliance by physics teachers on the recommended teaching methods in senior secondary schools.

There is no significant difference between the mean responses of public and private school teachers on the compliance by physics teachers on the recommended teaching methods in senior secondary schools.

There is no significant difference between the extent of content coverage of physics curriculum by physics teachers and students offering physics in senior secondary school.

References

Adolphus, I. A. (2020). Gender differentiation in chemical thermodynamics achievement in selected schools in Akwa-Ibom State. Journals of Humanities, Arts, Medicine and Sciences, 2(1), 11-20.

Adolphus, I. A. & Mumuni, A. A. O. (2016). Exploration of gaps between intended and enacted physics curriculum: teachers' professional development perspective.

Adebule, S. O., Ayodele C. S., & Akomolafe, O. D. (2023). Evaluation of the implementation of the senior secondary school physics curriculum in Nigeria. International Journal of Education, Learning and Development, 11(6), 34-43.

Ayandele, A. A. (2021). A survey of implementation of basic technology curriculum in junior secondary schools in Oyo south senatorial district. Al-Hikmah Journal of Educational Management and Counselling, 3(1), 74-80.

Busari, T. (2014). Effects of computer cooperative and individualized instruction on achievement and retention of senior secondary school students in physics in Minna Metropolis Niger State. An Unpublished MTech Thesis, Science Education Department, School of Science and Technology Education, Federal University of Technology Minna, Niger State.

Dambatta, U. (2015). An evaluation of the Nigeria certificate in education mathematics programme in the North-West, Nigeria. Ph.D. Research Proposal Seminar. Mathematics Education Department, Faculty of Education, University of Ilorin. Nigeria.

Federal Republic of Nigeria, (2014). National policy on education. Lagos: NERDC. Federal Government Printers.

Gamze, Y. K., Tugba, Y. Y., Kür ö B ²âb W7 a, C. (2017). Teachers' perception: competent or not in curriculum development. Malaysian Online Journal of Educational Sciences, 5(4), 56-73.

Hofstein, N. D., & Mamlok, F. J. (2016). Effect of discovery method on secondary school student's achievement in physics in Kenya. International Journal of Education and Evaluation, 2(7), 42-53.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement.

National Examination Council (2024). NECO chief examiners report. Physics (2015-2024). https://necoonline.org.ng/e-learning/Physics/physmain.html.

Nigerian Educational Research and Development Council (NERDC) (2008). The new

senior secondary school curriculum structure at a glance. Abuja. FME.

Ogundele, M. O. (2015). Implementation of basic science curriculum in Nigeria private secondary schools: Problems and prospects. Integrity Journal of Education and Training, 4(1),1-7.

Oluwadare, O. O., & Gana, C. S. (2020). Challenges in the implementation of the transformed secondary school physics curriculum in FCT, Abuja, Nigeria. Journal of Information, Education, Science and Technology (JIEST), 6(1), 20-25.

Omwirhiren, E. M. (2015). Enhancing academic achievement and retention in senior secondary school chemistry through discussion and lecture methods: A case study of some selected secondary schools in Gboko, Benue State, Nigeria. Journal of Education and Practice, 6(21), 159-160.

Taofeeq, B., Gana, C. S., Gimba, R. W., & Salako, K. A. (2022). Evaluate the implementation of physics curriculum in senior secondary school using Tyler's objective model in North- Central States, Nigeria. Journal of Economic, Social and Educational Issues, 2(2), 179-181.

Tyler, R. W. (1949). Basic principles of curriculum and instruction. Chicago: University of Chicago Press.

UNESCO (2015). Current challenges in basic science education. Week Report.

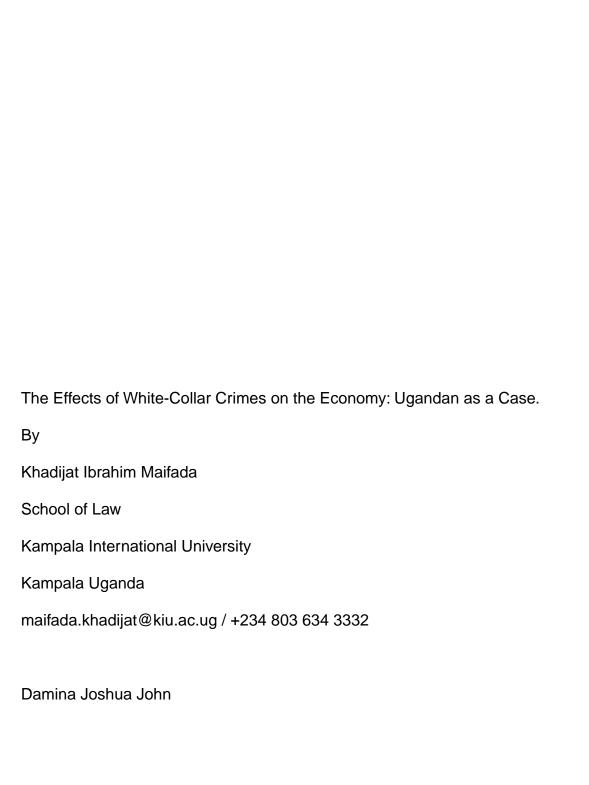
Wafula, E. N. (2019). Instructional influences on the implementation of physics curriculum in secondary schools, a case study of Bungoma County, Kenya. Unpublished PhD thesis department of curriculum instruction and educational media MOI University, Eldoret-Kenya.

West Africa Examination Council (2024). WAEC chief examiners report. Physics (2015-2024). https://waeconline.org.ng/e-learning/Physics/physmain.html.

West Africa Examination Council WAEC (2015-2024). Regulations and syllabuses for the West African Senior School Certificate Examinations. Lagos: WAEC.

Zheng, R.T. & Geelan, D.H. (2015). Content analysis of 9thgrade physics curriculum, textbook, lessons with respect to science process skills. International Journal of Educational Research and Technology, 2(5), 112-124.

.



```
School of Law
Kampala International University
Kampala Uganda
john.damina@kiu.ac.ng /+2348036292522
Alexander Ayeson Epu, PhD,
alexepu@nsuk.edu.ng / +234 803 613 6318
Faculty of Law
Nasarawa State University
Keffi, Nigeria
Kelechi Onwubiko
kelechi.onwubiko@kiu.ac.ug / +256 754 319421
School of Law
Kampala International University
And
Yasein Hassan M. Osman (Ass. Prof)
yasein@kiu.ac.ug /+249 91 267 2146
School of Law
Kampala International University
Kampala Uganda
```

Abstract.

White-collar crimes, including fraud, embezzlement, insider trading, tax evasion, and corruption, have significant consequences for a nation's economy. These crimes undermine financial stability, reduce investor confidence, and discourage foreign and domestic investments. They lead to revenue losses for governments through tax evasion, weakening public services such as healthcare, education, and infrastructure development. Additionally, corporate fraud and unethical business practices create economic inefficiencies, distort market competition, and increase the cost of doing business. The impact of white-collar crimes extends to job losses, bankruptcy of firms, and erosion of public trust in financial institutions. Corruption, a major component of white-collar crime, diverts public funds, reduces productivity, and weakens governance structures, further slowing economic growth. Countries with high rates of white-collar crime often experience capital flight, inflation, and reduced economic development. To mitigate these effects, strong regulatory frameworks, effective enforcement mechanisms, and public awareness campaigns are essential. Strengthening legal frameworks, improving corporate governance, and leveraging technology for financial oversight can help curb these crimes and protect the economy. Addressing white-collar crimes is crucial for sustainable economic growth, financial stability, and the overall wellbeing of a nation.

Keywords; Effects, White collar, Crime and Economic, in Uganda.

Introduction

The word white collar crime has been in the dark before the world until 1939 where a renounce professor of economic Edwin Hardin S. Brought it to lamp light and coined it white collar crime. He brought the understanding between financial transaction and other specific highly placed individuals who are prompt in committing serious economic offences. His aim was to shift the illicit object (money) to certain persons who are perpetrating these offences so as to mitigate the impact of white-collar crime in 1978. His discoveries led to many reformations on states legislations so as to crack down these offences, example US where it introduced RICO Act (Racketeer influenced and corrupt organization Act) and Banks Secrecy Act which were meant to bring transparency. The legislation reforms that were made still seems to be inadequate because they could not regulate crimes like money laundry and cyber financial terrorism and the corruption of cyber data now known as online sales. In the 20th -21th Centuries white collar crimes were in a massive increase because of advancement in technology, globalization and un-stableness in economic land scape. The evolution of internet new elements of crimes arose which also called for further reformation on the legal framework to mitigate the new challenges and to enhance better enforcement. Subsequently, another dimension of white-collar crime emerges; this is done where huge monies are wept away from the treasure of the states or organizations to another country. This new trend of offence is known as money laundry, the perpetrators are highly connected and they can secure the money from starting point to a destination. All these crimes got a boost when the world was experiencing globalisation. The offence is committed by people who are designated to be officials and the offence has common element known as greediness. White collar offences are fraud, identified theft,

embezzlement, bribery, money laundry extortion, insider trading and black mail etc. These offences have brought colossal laws to organisations, states and have become counterproductive to many nations Uganda inclusive, the perpetrators are normally identifiable but prosecution requires stronger institutions if not the offenders normally go Scott free because they are highly connected with the government, sometimes the government itself is a perpetrator of it through its agents, companies and foreigners. The research intents to have an in-depth analysis on the types of white-collar crimes, and what motivates people from committing these crimes and its resultant damage to the economy it also requires an academic voyage to see the extent of international and local legal framework on white collar crimes in other to make recommendations in areas that need improvement. The research canters its attention on Uganda and to see the level of damage that these crimes have got to the economics of Uganda, how it's happened and why it happens and to x-tray to the public the causes and the effect of it so as to serve as a deterrent to other perpetrators from committing the crimes in other to move the economy of Uganda forward.

Concept of white-collar crimes

Blue-collar crimes could be seen as extrinsic, while the white-collar crimes seem to be intrinsic in nature and therefore do not pause threat to the public but they are considered to be the most dangerous and many concepts have emerged from whitecollar crimes. These crimes are not far from the other crimes, they are the most dangerous. Therefore, others are of the view that punishment of white-collar crimes should come as of resultant effect and not commission effect. While other scholars still maintain that it should be given its official name and the punishment should be based on commission that is to say the convict should be compelled to restore what he has embezzled and be allowed to go free. Sueherland Hardin sees white-collar crime as crimes committed by persons of high social status in the cause of their occupation. However, this work differs from Harden's view by including persons of low social status in their place of work but the work agrees with Hardin's opinion when he said that whitecollar crimes are more harmful to the society than the ordinary crimes because the financial loss to the society is far greater than financial loss to a person. The professions generally are linked to white-collar crimes such as medical, engineering, legal profession, educational institution etc.

Medical profession: These are crimes that are committed by medical personnel in the cause of their duties, these involves giving of false medical certificate to people who were never patients in that hospital, assisting in illegal abortion, selling of sampled drugs and medicines to patient, and fake prolong treatment in order to increase bill, diversion of medical facilities to their private hospitals, false medical professional advice on pregnant woman from natural birth to CS in order to secure huge financial gain etc and that has affected the society negatively.

Engineering: Engineering has to do with construction generally where engineers negotiate with contractors to use substandard materials, and to carry out substandard work and to keep bogus record, construction of substandard roads, canals, bridges and house.

Legal profession: legal profession includes the Bar and the Bench where it supposed to be a store house of justice. Grievances are expected to be ventilated at the court to seek justice, however the bar and the bench are not helping matters, the bar serves as ministers in the temple of justice but it has turned to temple of injustice ranging from their chambers they advise their clients to perpetuate evils, this is because they know the laws and those areas that are weak. Due to that they encourage their clients to continue in committing white-collar crimes and when such public officials have been arrested and charged to court the same lawyer will capitalize on such weak legal framework for such case to be stroke out for having established a prima facie case or that the elements of the offence were not adequately established to warrant the court to compel the accused person to open his defense, and so the matter may likely end at that stage. Public officials normally rub minds with the bar and the bench for kick back in order to cause mis-carriage of justice. It's always said that it is better to have a good judge over a bad law than to have a good law over a bad judge. However, this perception has been very rear in judicial system where you still find a bad law is placed before a bad judge which is equal to injustice. Judiciary is said to have been corrupt and that is why public servants know that they can commit such crimes and get away with them.

Educational institution: the educational aspect of white-collar crimes has so many stages ranging from the admission process, teaching, assignment and test up to the exams. There are levels of corruption in all the layers. In the admission process the highest bidder are sub changed against a competent once therefore bringing brains that are not capable of comprehending teaching, and when it comes to assignment and test such students gets involved in mark buying in the end quakes are graduated to the labour market which cannot justify those certificates given to them and in turn affect the society. The appointment process in the academic is another area that has hindered competency, people in the hemps of affairs hardly give appointment to the most qualified candidates but choose to reserve such for their relations and commercial purposes. There is a principle in law that says a person cannot give what he doesn't have and certainly those who got their appointment through back doors cannot give what they don't have and that negatively affect the performance of the educational sector.

Legal frameworks

The legal framework on white collar crimes could be both international and local, the international legal framework are normally laws that regulates member states who are parties to these conventions or protocols, while the local legislations are limited to territory of a particular country such as Uganda. The research takes a look at conventions and protocols at the international level and Uganda related legislations on white collar crimes such as Computer mis-used Act 2011, Anti-corruption Act 2009 and Anti- money laundry Act 2013.

The United Nations Convention against Corruption (UNCAC). UN is the organisation

that regulates the world in terms of every aspect of life and the environment. it has also not kept quite in the aspect of crimes; corruption is one of them and therefore UNCAC is an extant law for combating corruption by public servant. it has also established another legal framework known as Palermo Convention which deals with trans-national organised crime. The convention provided a broad range of provisions against organised crimes. Convention on Cyber Crime 2001 which deals with offences relating to data protection and systems from cyber threat which all deal with cybercrime offences. Another convention is convention on combating bribery of foreign public officials; it criminalizes the act of bribing public officials in international transactions. The council of European Criminal Law Convention on Corruption which criminalizes perceives bribery as an act of preventing corruption from public officials.

Computer Mis-Used Act 2011

Ugandan parliaments have to enact a law called Computer Mis-Used Act (CMA) to tackle this type of corruption where people abuse their position for personal gain. Section 2 CMA defines CMA to mean any electronic or optional electrical data processing device, this relates to communication facility or operation in collection with such a device. This Act is meant to criminalise any person or group of persons who use computer other than the normal way prescribed by the Act to commit financial crimes or anything that will attract proceeds to them as against the employer.

Anti-corruption Act 2009

This Act criminalises any employee who takes into his possession money; property of an employer through his position in office for his personal gain commits an offence called embezzlement. Anti-corruption Act has expressly prohibited any employee's conduct that is detrimental to the employer either through his money, property or chooses in action. This law clearly stands against any act of unfaithfulness that will lead to a destruction of that organisation; this conduct is normally committed without any threat to life or blood shed to the immediate colleagues and the society at large. However, this research submits that the white-collar crimes are to be classified as capital offences which the result of their acts have led to loss of lives of so many citizens in the country as result of economic insecurity, and it should be accorded the status of felony so that no doubt the punishment should not be debated. Section 5 ACA sees bribery and extortion as a situation where the person offers gratification to another public officer like an award in other to enable such public officer to do or to omit to do certain things in his favour. The Act specifies moral conduct as bribery and extortion where the gift made by a particular person to a public official is meant to influence his decision away from the requisite standard provided by law for such duty.

Anti-Money Laundering Act

Section 1 of the Act sees money laundering as a procedure of converting illegitimately received proceeds into legitimate proceeds and that includes conceiving or disguising the nature, source or movement of such proceeds to a destination with the aim of

legalising them for their gain. The above legal framework has in one way or the other provided regulations as regards to white collar crimes. However, the research considers them in adequate for example, there are new trends of white-collar crimes such as technological theft, and plagiarism which are yet to be dealt with under Ugandan laws and such crimes have also cracked down nation's economy and the research is of the view that Ugandan legislation in relating to white collar crimes be upgraded in other to accommodate those new trends of offences.

Causes of white-collar crimes

There are several reasons why people engage in white collar crimes some of which are discussed below:

Greediness; most public officials go beyond their legitimate incomes for lack of satisfaction and they want to amass well for themselves and their unborn children and therefore causes them to alter figures of their employers in other to attract personal gain to themselves. In other words, greediness has to do with lack of contentment with the mega a resource you have and that leads one to committee such crimes.

Competition among colleagues; this is another dangerous angle that attracts employees from committing white collar crimes. this is done where a fellow colleague has attracted to himself wealth which envies the other colleagues of same rank, same salary structure but different wealth status that attracts the other colleague who was initially faithful to his employer to begin to have a rethink negatively to rise above those challenges by attempting to take a little or much from his employer's resources, and having tasted it attempted to do more and in the end become an expert sometimes even more than the mentor.

Family pressure; although pressures from families are normal and legitimate, these pressures normally entangle employees into negative character where the family demands outweigh his legitimate income, he ends up navigating the negative way in other to strike economic balance or he forces himself to create an equilibrium between the income and the expenditure demanded. Some of the employees therefore due to pressure been forced attracts some personal gains through his position in that organisation at the detriment of the employer.

Low salary scale; this is another factor that pushes employees to eat beyond their legitimate means. Where the employer thinks he is wise to withhold larger percentage of resources to the company, and therefore pays his employees salary that may not take them home, talk more of sustaining his family and therefore he begins to devolve other negative means by engaging in bribery, corruption, kick back using his position to increase financial benefits to himself negatively. This particular factor was propounded by Karl Marx where he said that deviant in a society was created as a result of the upper class intentionally reward the lower class inadequately comparing to the energy put into them and in the end the lower class began to source for illegal means to balance their economic pressure.

Weak legal framework; Another factor that gives people leverage to commits white collar crimes is when the employees have knowledge of their inadequate laws, they tend to have conducive atmosphere to commit such crimes because they know when they are arrested, investigated and prosecuted, the charges against them will have no legal backing therefore most of the prosecutions end at no case submission and the accused is discharged and acquitted.

Backing of the Appointors; Most of the appointees are errand boys to the appointers who participated in thuggery during electioneering campaign for their bosses, therefore the appointment given to them serves as a pay back to enable them recover their financial losses through those positions given to them. In other words, it's an opportunity for them to amass well. It is the opportunity for political compensation and therefore, any allegation against these appointees on corruption may not see the light of the day because they have the backing of their appointors.

Technical knowhow; some of these crimes are highly technical and requires those who have the skill to maneuverer them, for example cybercrimes otherwise known as computer-based crimes are committed by people who are highly knowledgeable in those areas and therefore they could break up any security code and hack into peoples account to commit such offences. These crimes motivated by their fellow pear groups who take their time to train them on how to navigate through software and the victims hardly noticed because they could operate and still leave your account balance at it was or restricting you from getting messages from those transactions.

Leaving large. This is a social aspect of life style that has attracted so many employees to commit white collar crime. These crimes are committed in other to earn prestigious status within the society, therefore an employee who wants to be figured out from the class of the rest ends up creating source of income that are not within the confine of the law so that he is distinguished by virtue of the fact that his social status speaks volumes to the society that he is living large.

Types of white-collar crimes

There are diverse ways of committing White collar crimes, these include and are not limited to Fraud, Embezzlement, Insider trading, Money laundering, Bribery, Corruption, Identity theft, Forgery, Tax evasion, Counterfeiting and Cybercrime.

Fraud: fraud could be referred to as a wide range of method used to negatively persuade others in other to receive their proceeds in exchange for a little to the victim. This is done by assuring the victim that in the transaction the fraudsters will gain lower financial benefit in the transaction.

Embezzlement; this is a type of white-collar crime that involves different forms of strategies. The employee engages in the practice of taking smaller cash from their employers account to his own account mostly this is done by highly placed officials

sometimes junior official, where they alter records of their employers into their personal gains, it could be that items belonging to the organisation ordered to be purchased will attract price inflation while it is not the real market price at the detriment of the employer.

Insider Trading; this is another type of white-collar crime where a particular person has a classified information about a particular company and immediately takes advantage of such information to invest in other attract a personal gain to himself by virtue of that confidential information he got at the detriment of the public. Example, where A notices that Company B may likely purchase company C and C has cheaper shares than company B, A immediately purchases shares from company C so that when B buys company C the share appreciates to his favour and that is interpreted to mean insider crime. Crane Banks' case, in 2016 the said Bank was involved in series of financial scandals including insider trading allegations though it was less publicized.

Money laundering: These white-collar crimes involve movement of illegal money through different channels of account before it subsequently gets to the culprit's account. This is done in other to over shadow the chain of movement of such money in other to distance the culprit from committing the crime example; where a particular public official send money through other means not through electronic means to another person within or outside the country mostly outside the country with the intention of him returning the money or the money is converted into goods to be supplied back to the culprit.

Bribery and corruption: This involves presenting a valuable to a public official either in cash or in kind in other to influence his decision positively to himself. This could be in cash, presenting properties, offering of jobs to relations of the public officials. The greatest characteristics of this type of crime involves conspiracy between the giver and the receiver in other to alter administrative procedure.

Identity theft: This crime involves utilising digitalisation of using people's identity to perpetuate this crime and this is done through downloading the victims' personal details to be used in deceiving people that the identity of the person is the genuine person on that platform. Uganda v Sserwamba & ors where illicit funds passed through various financial transactions to obscure their sources was held to be a money laundering.

Forgery; Forgery involves writing and presenting a content of document that claims to come from the original owner, while apparently it has no authorisation from the original owner. It is used to persuade a third party to agree on a particular content-document in other to influence his decision negatively. The perpetrators adopt these strategies to Loy the victim to submit valuables believing that he is dealing with the acclaimed owner of that document. Uganda v Kazinda it was held that the allegation leveled against Kazinda who forged a signature on a document to steal UGS 316 M was said to have been established.

Tax evasion; This aspect of white-collar crime is also monumental in the sense that

millions and billions of dollars which are expected to go to the government treasury as revenues but they are conspired by the tax payers and the tax collectors to be evaded for the benefit of both conspirators, the conspiracy is always between companies and the government officials by creating means where the companies will evade paying tax in other to create kickbacks to those government officials. The government officials then will facilitate the coverage of those crimes as if the companies are complying. This is always at the detriment of the employer and that becomes huge revenue loss to the government and in turns affect the general public who are the beneficiaries of these generated revenue. In Leona Helmsley's case where a hotel was convicted of tax evasion fraudulently claiming personal expenses as business expenses.

Counterfeiting: Counterfeiting as one of the white-collar crimes deals more of production where government offers to a company for a particular finished goods to be manufactured and supplied, such government officials will negotiate with the production company to produce and supply a substandard product at the value of standard product therefore embezzled the said financial differences at the detriment of the government example; substandard road construction, substandard building material to be used which normally results to accidents and loss of lives of innocent citizens.

Cybercrime; These are crimes that involves highly skilled computer operators who hack into cyber space to alter data base belonging to people and in other to wipe away their financial resources. this type of crime is through the victim's personal information in other to break through the security code to gain entrance to their personal server and this they do to individuals, banks, government agencies in other to cripple them financially. In United State v Gary Mckinnon where the defendant was held liable of computer fraud, see also Ugandan police v Kibuule (2019) where the defendant was convicted for hacking into a computer system of financial institution to steal 10000 USD.

Effects of white-collar crimes

White-collar crimes have brought a lot of devastating effects on all aspect of life, these has also given rise to other pockets of offences and has crippled the nation's economy. It has caused negative social impact, public financial losses, unemployment etc. The research intends to figure out some of these effects that have caused set back on the economy of many nations especially Uganda which is the case study of this Article.

Individual reputation: This effect of white-collar crimes is the culprit themselves. This is because once allegations were made and individual suspected leading to the arrested and prosecution, their initial reputation will immediately drop down by the society and person will no longer have the respect he deserves, this happens because the allegation is an attack on his character, integrity and above all his social status. This is done to discourage at all cost negative behaviours where society will publicly show to these public officials their grievances, displeasures on these un-ethical activities they engage in.

Loss of public trust: This has to do with situation where the general public has totally

loss confidence in these culprits to be given another chance to occupy public offices having betrayed the initial confidence given to them. That becomes a deterrent to the current public office holders having seen the humiliation their predecessor has experience.

Shareholders and investors: white-collar crime are crimes committed without tension or threat but they have devastating effect on shareholders and investors has been monumental on their part, this is because innocent people have invested on businesses through shares or cash all of a sudden the company is grounded financially, mostly the causes of liquidation are as a result of bribery and corruption on the part of officials. Government agencies are not left out in these high-profile crimes e.g. public corporation seems to be government enterprises where government plugs in money for business with the intention to subsidize such products or services on the citizens. However, the purposes are always been defeated by the people who are given opportunity to serve on those purposes on the detriment of the people.

Social Vices: This comes from a devastating effect of white-collar crimes, though the vices do not come immediately. They come as a result of hardships being faced because the economy is biting hard on the people, then metamorphosizes into Blue Collar Crimes. For example, smoking, stealing, burglary, robbery is committed due to the negative effect of the economy on the people. This can be exemplified on a student who has graduated long time ago without a job, got frustrated and decided to join negative peer group to commit crimes.

Legal Tussles: The effect of white-collar crimes attracts long legal tussles between the employers and the employees which results to distraction on the government on its primary responsibility to serve the people. Prosecution doesn't always go down well with the employer because the defenses' normally have the shield of presumption of innocence and that makes it difficult for the prosecution to discharge those burdens. The research is of the view that instead of the constitution defending the alleged culprit it should presume them guilty until the contrary is proved because the greatest task before the prosecution is to discharge that burden of prove and the defenses always leverage on the delay to continue their act of criminality.

Economic impact: When it comes to the effect of white- collar crimes, the nation suffers huge economic loss where the economic is not favourable for business which results to closure of companies, discourages new investors from coming in, as a result loss of jobs results to social crisis e.g. breaking of matrimonial homes, and prevention of youth from getting married. The duty of government primarily is to improve on the nation's economy by providing direct jobs or creating enabling environment for businesses to thrive. See Kazinda's case supra, allegation against members of parliament in Uganda.

Public Aware: Frequent and constant prosecution of white-collar criminals creates extensive public awareness. Situation where prosecution of these offences is ongoing in Courts, it exposes those culprits to the general public to know. This has helped in enlighten the public as to the offences and the offenders, therefore, making the people

to take precaution so that when they come to electioneering campaign or seeking of appointive position, people will reject their candidacy and choose the one that can serve them.

Legal Reformation: in prosecuting these offences, it brings to the public the legal weaknesses of the lacunas which the defendants hide to escape justice, the general public may pressurize the government for reform on those particular weak areas.

Impact on employees: the effect of white-collar crimes has rendered government or organization incapable to meet up up-to-date salaries of their employees, in ability of the government to meet up statutory requirements to upwardly review salaries of workers and promotions at the end living them at the mercy of either to continue or to drop out. Courts decisions against White-Collar Crimes in Uganda

The Global Fund Scandal in Uganda

Overview: The Global Fund scandal is one of the most significant white-collar crime cases in Uganda. It involved high-level officials who were accused of embezzling and mismanaging funds from the Global Fund to Fight AIDS, Tuberculosis, and Malaria. The Global Fund to Fight AIDS, Tuberculosis, and Malaria is an international organization that provides funding to countries to support programs that combat these diseases. In Uganda, significant fraud and mismanagement of these funds were uncovered in the mid-2000s, leading to a major scandal. Various officials within the Ministry of Health and Several NGOs involved in the implementation of Global Fund programs were implicated in this scandal. Funds meant for AIDS, tuberculosis, and malaria programs were embezzled by government officials and members of NGOs. Officials created false reports and documents to cover up the misappropriation of funds. Contracts for goods and services were awarded at inflated prices, with kickbacks given to officials. See Mukula v Uganda

Legal Action: Several officials were prosecuted. For example, Jim Muhwezi: Initially charged, Muhwezi was later acquitted of all charges in 2012 due to insufficient evidence.

Mike Mukula: A former health minister, was convicted of embezzlement in 2013 and sentenced to four years in prison for embezzling UGX 210 million (approximately USD 60,000) but later acquitted on appeal. Other officials faced various degrees of legal and administrative action.

Alice Kaboyo: Pleaded guilty to charges of abuse of office and was fined UGX 20 million (approximately USD 5,500) in 2012, avoiding jail time.

3. Insider Trading

Insider trading involves trading/buying or selling stocks or other securities based on non-public, material information about the company. An example, a company executive

buying or selling stock based on confidential information about an upcoming merger or financial report.

Example:

Martha Stewart: Stewart was convicted of insider trading after she sold her shares of ImClone Systems based on a tip that the company's stock was about to drop due to a negative FDA ruling.

The Crane Bank Insider Trading Allegations

Overview: Crane Bank, once one of Uganda's largest commercial banks, was embroiled in a series of financial scandals, including allegations of insider trading. Although insider trading cases are less publicized in Uganda compared to other types of white-collar crime, the collapse of Crane Bank in 2016 brought to light several financial malpractices, including potential insider trading by key figures within the bank. Insider trading activities include:

Privileged Information: Executives at Crane Bank allegedly used non-public, material information about the bank's financial troubles and impending regulatory actions to make financial decisions that would benefit them personally.

Asset Liquidation: There were allegations that key insiders sold off their personal stakes in the bank or related assets before the bank's financial difficulties became public knowledge, thus avoiding significant financial losses.

Manipulation of Financial Statements: Insiders were accused of manipulating financial statements to conceal the bank's true financial condition, allowing them to offload assets or shares at inflated prices.

Legal Action: In October 2016, the Bank of Uganda took over Crane Bank due to its critical undercapitalization and financial mismanagement. Subsequently, legal actions were initiated against Sudhir Ruparelia (Founder and majority shareholder of Crane Bank) and other executives for their roles in the bank's collapse, including allegations of insider trading.

The Bank of Uganda filed a lawsuit against Sudhir Ruparelia and his investment firm, Meera Investments, seeking to recover UGX 397 billion (approximately USD 105 million) for alleged fraud and financial misconduct, including insider trading. While the primary charges were focused on fraud and embezzlement, insider trading was a significant aspect of the case. Bank of Uganda v Sudhir Ruparalia and Another The Courts in Uganda have descended harshly on officials who engaged in white-collar crimes without any reservations and this has given strong signals to those who may be willing to do same.

Conclusion.

White-collar crimes are crimes that are still un-published before the general public, therefore 90% of the citizens know little or no thing about them since these crimes do not have individual victims therefore the perpetrators commits them in an atmosphere of peace without creating immediate threat to anybody, the same public officials dress to their offices with only pen in their hands and these pen becomes arm and ammunitions against the society which they do not know, until only when an organisation is grounded financially and is un abled to perform its functions then the public gets to know about such crimes. Because these crimes are committed mostly by highly placed individuals, prosecution of such individuals has been very difficult due to the fact that some are politically rooted, that make the judiciary in dilemma as to whether or not the trial should go on or not, secondly, most of the offenders of such crimes are in charge of larger percentage of the country's wealth, they tends to use such resources within their disposal to perverse justice, where at the end of the trial, they secure discharge and acquittal judgment. The country with weak legal mechanism finds it very difficult to secure conviction against them. The paper is of the view that if fighting against white-collar crimes is anything to go by the country must take legal steps to improve on her loss against these crimes, the paper is also recommending the existence of stronger institutions that can face such strong public officials who seems to be stronger than criminal justice system of the country. The citizens must rise up above these challenges by speaking with one voice against these perpetrators irrespective of whether they are same family, tribe, religion or political party.

Recommendations

The paper recommends the following to the government to take steps towards ensuring improvement of her legal and policies framework in blocking the loop holes these criminals engage in committing such crimes so as to better the live and living conditions of its citizens. The following are under-listed and discussed as recommendations to this work:

Strengthen legal framework: the paper recommends to the government that there is a need for the legal framework to be strengthened where there are no legal framework new ones be created. The research is also on the opinion that white-collar crimes charges should be upgraded to felony so as to attract death sentence penalty on the offenders, this is because white-collar crimes are the root causes of other crimes when legally traced.

Independent of judiciary: judiciary can only exhibit her judiciary and judicious competency in an atmosphere that is politically and this can be done if the laws of the land empowers them and assured them of the security of their jobs even when they are faced with high profiled cases that have nexuses with politicians and their hands seems to be tight in delivering justice, that will indeed boost the confidence of the citizens when it comes to arrest and prosecution of these high social status individuals.

Constitution of Special Tribunal: prosecution of cases at regular courts lingers for years

due to high volume of cases before the court which compels the courts to take long adjournment, Apart that, the Bar also contributes by filling motions and counter motions therefore causes the case to delay unnecessarily beyond reasonable time stipulated by law. The research is of the opinion that special tribunals be constituted that will give special jurisdiction to handle these crimes with new legislations to be made as to the time bound of prosecution of white-collar crimes so as to complete these cases on time.

Whistle-blower Policy: This policy should be encouraged by government to allow citizens who are within the knowledge of any financial misfeasance to voice out so as to draw the attention of the government to that particular ministry, this can only be done when there are extrinsic and intrinsic motivations on the part of the government and on the assurance of giving protection on such individual because these crimes can fight back. To take further steps in boosting the morals of the citizen's parliament can make a law so as to give legal backing to all the actions of government to that effect.

Restitution: most at time these white-collar guys face prosecution and after that they end up facing shallow penalties and at the end, they get away with all the proceeds they have stolen to enrich themselves living the society with no thing, it is in this regards that this paper seeks to advice the government to enact policies and laws that will mandates all culprits return all they have stolen at its currents financial value.

Training and re-training: the government should ensure capacity building on the workers so as to boost their understanding on how these crimes are perpetuated and to be able to cop the menace, it is the duty of the part of the government to ensure adequate training and re-training should be done on its workers so that they will be competent enough to detect these crimes that are committed on ground.

Public Awareness and Education: it is always said that if you are not informed you must be deformed it is on this lights that the work seeks to appeal to the government to ensure that constant programmes on Tv, Radio, Newspapers are geared through creating awareness on the citizens so as to equip them with information regarding white-collar crimes in other to ginger them to make contribution towards fighting against it. Government can also take steps by disseminating this information through its National Orientation Agency (NOA).

Transparency and Accountability: Government that governs without transparency and accountability is a government that has condoned corruption on its employees therefore transparency and accountability is key where responsibilities are given to public officials, these public officials ought to act transparency in other words open door policy where the general public will be carried along on each stage of its activities so that the citizens can also have the knowledge of what the government is doing, this can be done through public announcement as to how much was earmarked, how much was spent and how much left un-spent and that is accountability. By virtue of Freedom of Information Act, citizens should be allowed access to scrutinize public documents at all time so as to hold the public officials accountable of all their actions and inactions while in office that will reduce white-collar crimes.

Genocidal offences: white-collar crimes are crimes that have given right to other offences like war crimes, crimes against humanity, genocide, terrorism and therefore white-collar crimes which is the mother of all should also be listed among offences of the Rome Status 2003 so as to give International Criminal Court (ICC) jurisdiction to try, white-collar crimes have generated terrorism, war and genocide it should be given the same status of such offences been tried by the ICC. The paper submits in strong term that white-collar are not triable at the national courts because of how powerful the parties are e.g. the parties seems to be stronger than the institutions itself therefore there is a need for a court outside that country to assume jurisdiction so as to without fear or favour prosecute such offenders.

Disqualification from elective and appointive position: the paper is also of the strong view that in other to discourage such crimes from continuing, the government needs to enact laws and policies that will bar the perpetrators of these crimes from seeking both elective and appointive positions for life.