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Primary School Handicraft: Public Schools Waste to Wealth in Plateau State, Nigeria.

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ABSTRACT

This paper focuses on primary school handicraft: public schools waste to wealth in Plateau State, Nigeria. The design adopted for this research work is the survey research design. The sample population of this study was 4653 teachers and 186 primary teachers, selected by the researcher out of the population, under study, the hypotheses were tested using t-test statistical tool, and probability of retaining or rejecting the hypotheses is P≤0.05.; craft produced was not taught in primary school, indicates that traditional crafts was not taught in primary schools. The item-by-item analysis shows that items 7, 8, 9, 10 and 11 with mean values ranges from 1.19 1.20, 1.28, 1.22 and 1.19 are traditional crafts rated not taught, while item 6 with mean value of 1.76 was traditional crafts rated taught. The study recommends among others that Adequate provisions should be made by both the Federal Government, State, Local and private organizations to provide the required facilities for effective teaching and learning of craft and skill education for national development.

INTRODUCTION

Engaging primary school pupils in handicraft projects that focus on turning waste into wealth can be an excellent way to foster creativity, environmental awareness, and a sense of responsibility from a young age. Handicrafts are a diverse and culturally rich expression of human creativity, skill, and heritage. They contribute to the beauty of everyday life, connect people to their cultural roots, and provide economic opportunities for artisans around the world. Handicrafts are sustainable because in their making process they often use natural and eco-friendly materials, promote local production and fair-trade practices, reduce waste, and support artisan livelihoods and communities. With the help of government initiatives, craftsmen strive to promote the use of natural energy and light.

Handicraft in Nigeria, is based in Basic one to nine (primary – JSS) curriculum provides for the teaching of handicraft though as an optical subject, suggesting the huge need for technological advancement. But for this technological advancement to manifest, the young, impressionable students will need to have hands on experience in wearing, sewing, designing, painting, moulding, smiting, fabricating and others in schools. Shyllon, (2013), was of the opinion that teachers are supposed to be knowledgeable to able them deliver, but the teachers do not have the knowledge. They are not equipped with resources and the administration cannot query the wrong actions of scoring at examination only

because development is always measured along political lines, and the show of paper qualification to the detriment of practice. Handicraft is a unique expression of a particular culture or community through local expertise and materials. However, with increasing globalization, products are becoming more and more commodity-made and artisans find their products competing with goods from around the world. It is no longer possible to see a community of traditional craftsmen and their products separately from global market trends and competition (Mahgoub, 2015)

Craft, basically, not mass-produced. But if pupils work with their hands, even with the help of tools and machines, produce goods needed in a wide market space, sell to make a profit and thus contribute to national wealth, crafts can be called decentralized creative industries where the mind and human hands are more important than the machines and small equipment they use. This machine is a maker instrument, owned by the maker or by the community. So far, craft is free from domination and exploitation. Therefore, there is an industrial world without industrialization in the traditional sense and there is a lot of scope and need for it to leave the profile of being unorganized, reduced, and bankruptcy that has been going on for a long time (Mahgoub, 2015). It is hoped that the increase in craft creativity will be able to provide benefits in the form of increasing skills for craftsmen. With increasing skills, it will be easier for him to explore his abilities with a high selling price value. It is expected that handicrafts with high selling value will be able to increase the economy of craftsmen, even the status they carry.

Waste is a multifaceted concept that extends beyond its common association with discarded materials. It encompasses a broad range of issues, from environmental concerns and resource management to social and economic implications. Understanding waste requires a holistic approach that considers its environmental, social, and economic dimensions. By adopting sustainable practices, embracing technological innovations, and fostering a global commitment to responsible waste management, society can work towards mitigating the impact of waste and moving towards a more sustainable future. Waste can come in different forms; it could be solid-metal, gaseous-chemical or liquid. Fakere, Fadairo and Oriye (2012) examined the typology, characteristics and future trends of solid waste in selected Nigerian urban cities (including Ijebu-Ode) and asserted that the major components of waste are degradable materials (food remnants, paper, and rags) and non-biodegradable (plastics, tins, metals, bottles, glass, and bones). The finding was further buttressed by Fakere, Fadairo & Oriye (2012) who submitted that most activities which affect the environment stem from the need for food; its production, processing and preparation. As such, some of the wastes are likely to have socio-economic potentials if effective urban mining mechanisms are designed.

Solid waste management is the collection, treatment and disposal of solid materials that are discarded because they have served their purpose or are no longer useful. Improper disposal of solid waste can create unsanitary conditions, and these conditions, in turn, can lead to pollution of the environment and the outbreak of vector-borne diseases, that is, diseases spread by rodents and insects. The task of solid waste management presents complex technical challenges. It also poses a wide array of administrative, economic, and social problems that must be managed and solved (Jerry, 2015).

Waste to wealth refers to the concept of converting waste materials into valuable resources, thereby creating economic and environmental benefits. This idea is rooted in the principles of sustainability, circular economy, and responsible resource management. The goal is to minimize the negative impact of waste on the environment while simultaneously extracting value from discarded materials. Examples of waste-to-wealth initiatives include recycling programmes, composting organic waste, converting industrial by-products into usable materials, and repurposing discarded items into new products. These initiatives not only contribute to environmental conservation but also demonstrate the potential for economic prosperity through responsible waste management. By combining education, creativity, and a practical application of environmental principles, this waste-to-wealth through handicraft will not only enhances the students' skills but also instills a sense of responsibility towards the environment from an early age.

The transforming discarded or unwanted items, often considered trash or waste, into valuable or desirable products. It involves repurposing, upcycling, or creatively reusing materials typically disposed of in landfills. For instance, repurposing or upcycling trash can create distinctive and valuable products while reducing the demand for new raw materials. Various materials can be involved in the waste to wealth initiatives; for example, discarded wood can be transformed into stylish furniture pieces, old fabrics can be repurposed into trendy fashion accessories, pamphlets in the daily newspaper into decorative place mat or glass bogle’s can be turned into decorative vases

Like the ones said above, there are many possible options, but all these fall under general examples; nevertheless, when we talk from an advanced scientific angle, we can create much more valuable products, such as food waste to value added products like biosurfactants, plastic waste to activated carbons, spent batteries into buffer storage units for emergency purposes or stationary energy storage in variety of application and others like this. This way, Trash to Treasure promotes sustainability, resourcefulness, and environmental consciousness. Additionally, when we look at the Trash to Treasure projects with more profound thought, they promote environmental sustainability and encourage creativity, craftsmanship, and entrepreneurship. Overall, waste to wealth represents a shift toward embracing sustainability, encouraging resourcefulness, and fostering a culture of various activities that broadly fall

under a circular economy. However, for such transformation to become a new normal, we must unlock the power of resource conservation, recycling, and waste management practices.

Resource Conservation, Recycling, and Waste Management" are interconnected practices that aim to reduce the consumption of resources by promoting the reuse and recycling of materials and effectively managing waste to minimize environmental impact, enable sustainable development, conserve energy, offer economic benefits, promote climate change adaptation and mitigation techniques, and promote public health and safety. As a result, the importance of resource conservation, recycling, and waste management cannot be ignored in today's world.

Waste to wealth through handicraft

Waste to wealth through handicraft" is an innovative approach that involves using discarded or waste materials to create handmade crafts, adding value to what might otherwise be considered as refuse. This concept aligns with the principles of sustainability, recycling, and upcycling according to Hilary (2018). Here's how this process can be implemented.

1. Materials Collection and Sorting:

- **Waste Identification:** Identify suitable waste materials, such as paper, plastic, glass, fabric scraps, or discarded items.
- **Sorting:** Categorize the collected materials based on type and condition to determine their usability.

2. Design and Creativity:

- **Brainstorming Sessions:** Encourage creative thinking to generate ideas for crafts using the available waste materials.
- **Inspiration:** Draw inspiration from traditional art, culture, and existing handicraft techniques.

3. Skill Development:

- **Training Workshops:** Conduct workshops to teach crafting techniques, upcycling methods, and the basics of turning waste into attractive products.
- **Incorporate Local Skills:** Utilize local craftsmanship and traditional skills that may already exist in the community.

4. Creation of Handicrafts:

- **Group Projects:** Organize group projects where participants collaborate to create unique handicraft items.
- **Innovative Techniques:** Experiment with innovative techniques to transform waste materials into aesthetically pleasing and functional products.

5. Market Research and Product Development:

- **Identify Trends:** Research current market trends for handmade products and identify potential target audiences.
- **Product Prototypes:** Develop prototypes to gauge the market appeal of the crafted items.

6. Market and Sell Handicrafts:

- **Local Markets:** Participate in local craft fairs, markets, or community events to showcase and sell the handmade products.
- **Online Platforms:** Explore online platforms to reach a broader audience and sell the crafts.

7. Community Engagement:

- **Awareness Programs:** Conduct programs to raise awareness about waste-to-wealth initiatives and the importance of supporting local artisans.
- **Involvement:** Involve the community in the creation process or seek their input on the types of products they would be interested in.

8. Reinvestment and Sustainability:

- **Reinvest Profits:** Use the generated income to reinvest in the project, acquire more materials, and expand the range of handicrafts.
- **Environmental Considerations:** Emphasize the environmental benefits of upcycling and sustainable crafting practices.

9. Educational Initiatives:

- **School Programs:** Integrate waste-to-wealth handicraft projects into school curricula to educate students about sustainability and creativity.
- **Workshops for All Ages:** Extend workshops and awareness programs to involve people of all ages in the community.

10. Monitoring and Evaluation:

- **Feedback Mechanism:** Establish a feedback system to gather input from customers and the community.
- **Impact Assessment:** Regularly assess the social, economic, and environmental impact of the waste-to-wealth handicraft initiative.

11. Collaboration and Partnerships:

- **Local Businesses and NGOs:** Collaborate with local businesses and non-governmental organizations (NGOs) to enhance market reach and gather support.
- **Government Initiatives:** Explore partnerships with government initiatives supporting sustainable practices

Statement of the Problem

The conventional approach to waste management often results in the underutilization of valuable resources, contributing to environmental degradation

and economic inefficiency. In light of this, the waste-to-wealth through handicraft initiative faces several challenges that hinder its successful implementation and impact. Lack of awareness in the community about the potential value in waste materials, insufficient participation of community members in waste collection and segregation processes for handicraft projects, Limited access to training programs for local artisans and community members on upcycling and handicraft techniques, insufficient development of skills needed to transform waste materials into high-quality, marketable products.

Some of the primary leaver could not further their education due to some reasons such as lack of sponsorship or examination failure, are always seen roaming the street aimlessly, looking for any slight opportunity to gain advantage of helping themselves. Some of them engaged in various social vices such as kidnaping, banditry, armed robbery to mention but few. It is so because there is a saying that an idle mind is a devil's workshop. The fear is that if this one way traffic type of educational training given to secondary school students continue, it is likely that Nigeria will hardly get out of this underdevelopment condition and will definitely affect national development, hence the need for this study

Addressing these challenges is imperative to ensure the success and sustainability of the waste-to-wealth through handicraft initiative. This statement outlines the key problems that need attention and intervention, providing a foundation for developing effective solutions within the waste-to-wealth through handicraft initiative

Purpose of the Study

The main purpose of the study was to investigate Primary School Handicraft: Public Schools Waste to Wealth in Plateau State, Nigeria. Specifically, the study sought to;

1. find out the types of craft produce from waste are taught in primary schools in Plateau State, Nigeria;
2. determine the type of traditional crafts inculcated to primary school pupils for self-reliant in Plateau State, Nigeria
3. determine the types of metal-making taught to pupils in primary schools in Plateau State, Nigeria

Research Questions

The following research questions were raised to guide the study:

1. What are the types of craft produce from waste are taught in primary schools in Plateau State, Nigeria?
2. What are the type of traditional crafts inculcated to primary school pupils for self-reliant in Plateau State, Nigeria?
3. What are the types of metal-making taught to pupils in primary schools in Plateau State, Nigeria

Hypotheses

Three hypotheses were formulated to guide the study:

1. There is no significant difference in the mean responses teachers on how types of craft produce from waste are taught in primary schools in Plateau State, Nigeria.
2. There is no significant difference in the mean responses teachers on the type of traditional crafts inculcated to primary school pupils for self-reliant in Plateau State, Nigeria.

METHODS

Descriptive survey research design was used for the study. Population was 4653 primary school teachers in Plateau State, Nigeria. Purposive sampling was used to sample 10 schools making a sample of 186 teachers, The instrument used for data collection for this study was a self-structured questionnaire. The instrument was validated by 3 experts in varying disciplines and was subjected to reliability analysis using the test of internal consistency. The Cronbach Alpha reliability coefficient was computed and the results obtained yielded a reliability coefficient alfa (α) value of 0.73. Data collected was analyzed using descriptive statistics of arithmetic mean to answer the research questions. The mean responses were weighed with real limit of numbers as follows: Very HighlyTaught (VHT) = 3.49-400, Highly Taught (HT) = 2.50-33.49, Taught (T) = 1.50-2.49 and Not Taught (NT) = 1.00-1.49. The items with mean ratings of 1.00-1.49 were considered Not Taught; items with mean ratings of 1.50-249 were considered Taught, items with mean ratings of2.50- 3.49 were considered Highly Taught while items with mean ratings of 3.50-4.00 were considered Very Highly Taught. The three null hypotheses formulated were tested using independent samples t-test at 0.05 level of significance. Decisions were taken based on values of associated probabilities denoted by p. When the p-values were found to be equal or less than 0.05 alpha levels, the noted difference was said to be statistically significant therefore, the null hypothesis was rejected. But if the p value found to be greater than 0.05, the noted difference was statistically insignificant therefore, the null hypothesis was accepted. Statistical Package for the Social Sciences (SPSS) version 21 aided the researcher to analyze the data.

RESULTS

The results are presented in the order of the research questions and the corresponding hypothesis.

Table 1. Mean range on types of craft produce from waste are taught in primary schools in Plateau State, Nigeria

S/N	Craft production taught to pupils	Mean	SD	Decision
1	using waste leather to produce play materials	1.16	0.38	Not Taught
2	using waste metal to produce cartoon cars	1.19	0.39	Not Taught
3	using animal waste for gas production	1.32	0.47	Not Taught
4	using clay soil to produce craft	1.72	0.49	Taught
5	Engineering Craft Practice	1.19	0.39	Not Taught
Cluster Mean		1.32	Not Taught	

Data presented in Table 1 shows cluster mean of 1.32 which indicates that craft produced was not taught in primary school. The item-by-item analysis shows that items 1, 2, 3, and 4 with mean values ranges from 1.6, 1.19, 1.32 and 1.19 are craft production taught rated not taught, while item 4 with mean value of 1.72 was craft production taught to pupils rated taught.

Table 2. Mean range on type of traditional crafts inculcated to primary school pupils for self-reliant in Plateau State, Nigeria

S/N	Traditional Craft Taught to Students	Mean	SD	Decision
6	Dying and Bleaching	1.76	0.64	Taught
7	Clothing and Textile	1.19	0.40	Not Taught
8	Printing Craft Practice	1.20	0.39	Not Taught
9	Upholstery	1.28	0.51	Not Taught
10	Furniture Making	1.15	0.41	Not Taught
11	Fishery	1.22	0.36	Not Taught
Cluster Mean		1.30		Not Taught

Data presented in Table 2 shows cluster mean of 1.30 which indicates that traditional crafts was not taught in primary schools. The item-by-item analysis shows that items 7, 8, 9, 10 and 11 with mean values ranges from 1.19 1.20, 1.28, 1.22 and 1.19 are traditional crafts rated not taught, while item 6 with mean value of 1.76 was traditional crafts rated taught.

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Table 3. Mean range on types of metal-making taught in primary schools in Plateau State, Nigeria

S/N	Metal-Making Craft Taught to Students	Mean	SD	Decision
12	Sheet metal forming	1.18	0.39	Not Taught
13	Welding and Fabrication	1.19	0.39	Not Taught
14	Metal cutting	1.21	0.41	Not Taught
15	Blacksmithing	1.25	0.44	Not Taught
16	Joining metal	1.18	0.38	Not Taught
17	Metal fabrication	1.39	0.51	Not Taught
18	Drilling of metal materials	1.71	0.47	Taught
19	Forging	1.33	0.47	Taught
20	Casting	1.94	0.78	Taught
Cluster Mean		1.37		Not Taught

Data presented in Table 3 shows cluster mean of 1.37 which indicates that metal- making crafts was not taught in primary schools in Plateau State, Nigeria. The item-by- item analysis shows that items 12, 13, 14, 15, 16, 17 and 19 with mean values ranges from 1.18, 1.19, 1.21, 1.25, 1.18, 1.39 and 1.33 are craft production taught to students rated not taught, while items 18 and 20 with mean values of 1.71 and 194 were metal-working crafts rated taught.

Hypothesis 1. There is no significant difference in the mean responses of teachers on how craft production is taught to primary schools.

Table 4. The t-test comparison of male and female teachers on craft produced are taught in primary schools in Plateau State, Nigeria.

Student	N	Mean	SD	df	t-cal	p-value	Decision
Male teachers	186	1.32	0.19				Not significant
Female teachers				370	-.101	0.92	
	186	1.32	0.22				

The t-test in Table 4 shows that there is no statistically significant difference in the mean ratings of teachers. This is shown by the t-cal value of -.101 and p-value of 0.92 which is more than alpha value 0.05 level of significance. Therefore, the null hypothesis of no significant difference was accepted.

Hypothesis 2. There is no significant difference in the mean responses of teachers on how traditional crafts is inculcated to primary school pupils.

Table 5. The t-test comparison of male and female teachers traditional craft inculcated to primary school pupils in Plateau State, Nigeria.

Student	N	Mean	SD	df	t-cal	p-value	Decision
Male teachers	186	1.38	0.25				
Female teachers				370	7.41	0.00	Significant
	186	1.20	0.18				

The t-test in Table 5 shows that there is statistically significant difference in the mean ratings of teachers on traditional craft in primary schools in Plateau State, Nigeria. This is shown by the t-cal value of 7.41 and p-value of 0.00 which is less than alpha value 0.05 level of significance. Therefore, the null hypothesis of no significantdifference was rejected

DISCUSSION OF FINDINGS

Following the analysis of the 3 research questions that guided the study and the 2 null hypotheses formulated, the discussions of the findings are as follows:

The data presented in respect to research question one and hypothesis one on Tables 1 and Table 4 revealed that primary schools in plateau state are not taught product crafts. The null hypothesis which states that there is no statistically significant differencein the mean responses of teachers on types of craft produce from waste taught in primary schools in plateau states was upheld. This in agreement with Veeber, Erji and Lind (2017) who found that, craft and skill have in recent decades been fighting for its place in education setting. Adedotun (2019) also averred that Nigeria is a nation stuck in underdevelopment due to technological negligence. Seeing that Nigeria is still struggling with the wound bitten by underdevelopment, there is every need to continue in search of the right medicine, and institutional approach may seem to be the remedy. The results is also in consonance with the findings of that of Lawal (2019), who averred that Nigerian education policy makers are bereft of ideas but often they are and their patrons lack the political will to implement the nations ambitious agenda of raising enterprise-minded school children based on the teaching of craft and skill in school as espoused in the primary and secondary school curriculum.

The findings of the study in respect to research question two and hypothesis two on Tables 2 and 5 revealed that primary schools are not taught traditional crafts. The null hypothesis which states that there is no statistically significant difference in the mean responses of teachers on types of traditional crafts taught in primary schools was rejected. The findings of the study is in agreement with that of the findings of Eastwood College (2019) that arts and craft are typically taken for granted as a must for

children and young adults in the formal education set ups. The researcher also interested that over the past several years, many schools have unfortunately cut down on art in their school curriculum. Music, painting and theatre are fast disappearing. The findings also resemble that of Vohra (2019) who discovered that in today's academic scenario, the crafts an arts have all but entirely disappeared in school systems. There was a time when creative classes were made compulsory for students, and were given their due recognition by parents, teachers and students alike. However, the current atmosphere of mounting academic pressure and curriculum goals has pushed arts and crafts to the sidelines.

CONCLUSION

It is discovered that the development of this country to keep pace with her counterparts in the world depends solely on craft and skill education. It is now important that every serious Nigerian must embrace craft and skill education to promote national development.

Recommendations

In view of the forgoing, the researcher therefore, made the following suggestions:

1. Adequate provisions should be made by both the Federal Government, State, Local and private organizations to provide the required facilities for effective teaching and learning of craft and skill education for national development.
2. More funds should be made available to schools at all levels to enable them obtain all that is needed for effective teaching and learning of craft education.
3. Ministry of education in conjunction with the federal ministry of information should liaise with social organizations to create more awareness to the public to see the need and importance of craft and skill education as one of the mediums for national development.
4. Successors of previous administrations in Nigeria should learn how to continue with policies made by their predecessors so as not to cause programme distortions that may result to programmes failure.

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