Exploring the Impact of Creative Art Design on Visual Communication and Audience Engagement: Evidence from University of Maiduguri, Northeastern Nigeria

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Abstract: *This study delves into the impact of creative art design on visual communication and audience engagement, focusing on the context of the University of Maiduguri in Northeastern Nigeria. Through a mixed-methods approach incorporating qualitative and quantitative techniques, the research explores existing theories and practices related to creative art design, visual communication, and audience engagement. By conducting interviews, surveys, and observational analyses, the study aims to provide comprehensive insights into how various forms of creative art design, including posters, flyers, and digital media, are utilized across the university campus and their effectiveness in engaging the audience. The findings reveal a significant positive correlation between exposure to visual art experiences and creativity skills among high school students, highlighting the importance of incorporating visual art education into the curriculum to foster creative thinking skills and prepare students for future endeavors in the global marketplace. The research underscores the importance of integrating visual art education into the educational framework, advocating for curriculum development that prioritizes creative thinking skills. Recommendations include sharing the findings with university stakeholders, parents, students, and educators to emphasize the benefits of a robust visual arts curriculum. Ultimately, this study contributes to bridging the gap in knowledge regarding the impact of visual art instruction on creativity, paving the way for informed decision-making and curriculum enhancements in educational settings.*

Keywords: *Creative Art, Visual Communication, Audience Engagement, University of Maiduguri, Nigeria.*

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Introduction

Art is a method of communication that has pervaded human culture for thousands of years. It is employed to convey a message that is often deep and implicit. The observer derives the message from art through interpretation. Art in the form of pictures often rings true the idiom, "a picture can say a thousand words." The artist forms a picture with the intention of conveying a message or an impression. As the observer views the picture, he receives the signal from the painting and attempts to interpret the intention of the artist. The effectiveness of communication is determined by how close the message received is to the message intended. In recent years, methods and techniques of art and design have seen a vast upheaval. Traditional methods have been replaced by powerful computer tools and the need for effectiveness. Marketing and communication by industry have realized the potential of art as a communication medium, and many artists and designers are employed to convey an explicit message to an observer. Art is a communication

medium like any other. It is the goal of the artist to convey a message to a receiver in a manner such that the message is received in the original form. Wilson & Zamberlan, (2017).

Standard form of communication between a transmitter and a receiver is aided by two factors: a medium and a signal. The medium is the means of transmission that carries the signal. In everyday conversation, the medium that is employed is oral sound. The transmitter forms a signal by generating an acoustical disturbance. The signal is transmitted through the air and the receiver picks up the signal with a microphone. The second factor, the signal, is the message to be conveyed and the transmission is the act of conveying it. A key characteristic of the signal is that it is the entity which is passed from the transmitter to the receiver. During the course of the transmission through a medium, it may degrade and become altered as a result of interference from extraneous sources. There are two types of signals: analog and digital. An analog signal is continuously variable, meaning it can take any form. A digital signal is discrete, meaning it can only take certain defined values. The reproduction of digital signals is favorable to that of analog signals, as it is not subjected to degrading effects during transmission.

Studying visual communication would not be separated from the creative and artistic methods of creating the image as a visual message. Art and design are things that are involved in the production process of images or visual forms. The closer the creative art design is, the more it will affect the effectiveness of visual communication itself. Gilles and Tim (2006 in Nirwandar, 2013) define visual communication as the communication that delivers the message in visual form. This means that any form of image could be called visual communication, and therefore, art and design are the most important components of visual communication. What really defines the visual message can be understood through the art taste and the compatibility of the design with the messages wanted to convey. It depends on the creativity of designing the visual form. The more creative the design of the visual form, the more capable it will be to deliver the messages.

Since the development of digital technology, communication is not merely limited to sending and receiving messages, because it could be conveyed via graphic, visual, and design. According to Dijck (2006 in Kencana, 2018), there are three stages in the media evolution of the communication process. In the early stage, the media could only be used as tools to distribute messages. In the next stage, it can be used to shape reality and create new content by manipulating the message. The final phase is when the media can create artificial reality and substitute the real message with the virtual one. Visual communication appears in the second phase when the media starts using images and visual design to manipulate the message. In other words, the way of communication process can be seen in the design. In this phase, competencies in visual communication are needed because it requires methods of putting the messages or information into images, illustrations, photography, and other visual forms. The School of Visual Art and Design is one concentration to learn more about visual communication for beginners, study cases, or professionals who need a new system for working with visual style.

The University of Maiduguri, like many academic institutions, seeks to optimize its communication strategies to effectively engage with its diverse audience. However, there is a lack of comprehensive understanding regarding the impact of creative art design on visual communication and audience engagement within its context. This knowledge gap presents a significant challenge for the university's communication department in devising effective strategies to convey its message, attract attention, and foster meaningful connections with its

stakeholders. Without a clear understanding of how creative art design influences visual communication and audience engagement, the university may miss out on opportunities to enhance its brand image, promote its initiatives, and build stronger relationships with its community.

To address this issue, there is a need for in-depth research that explores the relationship between creative art design, visual communication, and audience engagement specifically within the University of Maiduguri's environment. This study will investigate various forms of creative art design, such as graphic design, multimedia presentations, and visual storytelling, and their impact on communication effectiveness and audience responses. By examining factors such as cultural context, audience preferences, and message resonance, the research aims to provide insights that can inform the development of tailored communication strategies for the university. Ultimately, this investigation will contribute to the advancement of knowledge in the field of visual communication and provide practical recommendations for improving audience engagement within the unique context of the University of Maiduguri.

Literature Review

Importance of visual communication

One of the most frequent reasons visual communication is used is to promote a product. The purpose of a promotion is to communicate a specific message to a target audience. This is in the hope the message will stick in their mind when they are considering a purchase. A clear and effective way to communicate a message is to use a visual. The saying "a picture speaks a thousand words" is true; a visual can often give a person an understanding of a message in a shorter amount of time compared to a written or spoken method.

Visuals are often used as an aid during a presentation to help provide direction and keep the audience focused on the subject. Often, the audience's attention span will determine how effectively a message is communicated. By having a visual aid, the audience is more likely to follow through to the end of a presentation compared to a presentation without a visual aid. This is known as a completion rate; the higher the rate, the more effective the message.

Visual communication is a very important aspect in the communication world. It is widely used and is becoming an increasingly important part of the overall communication process. While new technologies in the visual arts have been recognized as a field for research, very little has been done to compare the effectiveness of computer-generated visual arts to the traditional. This has become an issue for institutions wanting to implement courses and produce quality art and design work. The findings from this study will provide useful evidence for these institutions, considering that there has not been much in this area.

Visual literacy can also be seen as how a person is able to interpret an image, as Fry (in Read, 2000) states that "An image is not only a simulation of a real world, but a separate world in itself." It has become a reality where an image, especially in advertisements, has its own messages and has become a main channel in passing information. Coming back to the ads, the demand in an advertisement is very high in hopes of influencing people's thinking, behavior, and achieving a response. With a high demand for visuals, especially in advertisements, it opens up more opportunities in art and design. That's why research to compare art and design media is important to enhance the potential of art students.

The study compare the effectiveness of computer-generated visual design and traditional art media in the development of the creativity of students. As supported by Kerry (1999) in his book, "Expressive Drawing," visual literacy is the ability to interpret, negotiate, and make meaning from information presented in the form of an image. It is important for a person to be visually literate as this is a basic skill in the 21st century. But the ability to interpret and communicate using visual language is not confined to artists; art is a medium for everybody, even in different professions, to enhance better performances. According to Fry (in Read, 2000), "The future in the construction of messages, stories, and experiences using motion and sound is almost certain."

The impact of creative art and design has been studied extensively across various fields including psychology, sociology, education, and neuroscience.

Research has shown that engaging in creative activities such as painting, drawing, or crafting can have therapeutic effects, reducing stress, anxiety, and even symptoms of depression. Studies like those conducted by Stuckey and Nobel (2010) have demonstrated the positive impact of art-making on psychological well-being.

Similarly, Runco and Jaeger (2012) found that participation in arts education positively correlated with cognitive abilities such as critical thinking, problem-solving, and creativity. They explored how engaging in creative activities can enhance cognitive development, particularly in children.

Furthermore, O'Neill and Lambert (2016) examined the role of community-based art projects in promoting social inclusion and found that such initiatives can strengthen community bonds and empower marginalized groups. Creative art and design often serve as a means of expression and communication, fostering social cohesion and community engagement.

Numerous studies have investigated the impact of integrating creative art and design into educational curricula. For instance, research by Hetland et al. (2007) on the "Studio Thinking Framework" highlighted how teaching visual arts can enhance students' skills in problem-solving, perseverance, and self-expression, with positive spill-over effects on academic achievement in other subjects.

On their part, Vartanian et al. (2013) in their study opine that advances in neuroscience have enabled researchers to study the neurological underpinnings of creativity and artistic expression. Studies using techniques such as functional magnetic resonance imaging (fMRI) have shown that engaging in creative activities activates regions of the brain associated with reward, emotion regulation, and cognitive control (e.g., the dorsolateral prefrontal cortex).

Methodology

The methodology begins with a comprehensive literature review to understand existing theories, concepts, and empirical studies related to creative art design, visual communication, and audience engagement. This review will provide a theoretical framework for the study and identify gaps in current knowledge. Following this, a mixed-methods approach will be employed, combining qualitative and quantitative techniques. Qualitative methods, such as interviews and focus groups with students, faculty, and staff involved in creative art design and visual communication, will provide in-depth insights into their perceptions, experiences, and practices. Quantitative methods, such as surveys distributed among a representative sample of the university community, will gather

statistical data on audience engagement levels and preferences for various forms of visual communication.

Moreover, the study will utilize observational techniques to analyze the actual impact of creative art design on visual communication within the university context. This involves observing and documenting how different forms of creative art design, such as posters, flyers, and digital media, are utilized across campus and their effectiveness in engaging the audience. Additionally, content analysis of existing visual communication materials will be conducted to evaluate their design elements, message clarity, and audience appeal. By triangulating data from multiple sources, this methodology aims to provide a comprehensive understanding of the role of creative art design in enhancing visual communication and audience engagement at the University of Maiduguri, thereby contributing valuable insights to both academic scholarship and practical applications in educational settings.

Results and Discussion

The premise of this study posited that high school students with exposure to visual art would demonstrate notably higher levels of creativity compared to those without such exposure. Conversely, it suggested that students enrolled in high school visual arts courses would exhibit significantly greater creativity scores than those not enrolled in such courses. The null hypothesis, in contrast, proposed that there would be no substantial disparity in creativity scores between students enrolled and not enrolled in high school visual arts courses.

Data on creativity skills were gathered from a sample of 50 University of Maiduguri students. This data was obtained through a creativity test administered to two final-stage university participant groups. One group comprised students enrolled in an introductory visual arts course, while the other consisted of students taking an introduction to music course. Both groups underwent pre and posttests to ascertain whether a statistically significant variance in creativity scores emerged after one term of visual arts instruction compared to the music course, which was akin to a historical study.

The study was undertaken with the aim of showcasing the importance of art education in schools and its potential to drive social change by supporting initiatives to enhance visual art education in public schools. Analysis of the data revealed a correlation between creativity skills and exposure to visual arts. Furthermore, the data suggested that engaging in visual art experiences could enhance creativity and contribute to positive social change by offering educators a platform to cultivate creativity skills. These findings could help education stakeholders tackle concerns regarding standardized testing, which often downplays the significance of visual art instruction in high schools.

Findings and Analysis of Data

Following the researcher's utilization of the Scoring Manual to assess the tests, both pretest and posttest raw sub scores were derived for individual students. These raw sub scores, obtained from the pretest and posttest of both participant groups, played a crucial role in assessing the progress or regressions over the academic term, as well as in determining the National Percentile (NP) for each student. To establish norms based on students' performance, encompassing standard scores and NP ranks for various subcategories such as fluency, originality, elaboration, abstractness of

titles, and resistance to premature closure, the Norms Technical Manual was consulted. Additionally, composite measures, average standard scores, creativity index, and NP ranks for two composite scores were provided in the manual. The NP for each assessed area (e.g., fluency, originality, elaboration, titles, and closure) was determined by referencing the appropriate table corresponding to the grade level in the Norms Technical Manual, which also facilitated the determination of corresponding NP and Standard Score (SS) for each area. Subsequently, each area's NP and SS were computed using the manual. The researcher then calculated the average standard score and its national percentile by summing up the five standard scores and dividing the total by five. Finally, the Creativity Index (CI) was computed and its NP was determined by adding the creative strengths checklist score to the average standard score.

The researcher opted for a one-tailed independent t-test to analyze the data. SPSS software was utilized to conduct the analysis, assessing the variation in scores between student groups with and without visual art experience. A significance level (Alpha) of .05 was set for this test. The degrees of freedom in the t-test equaled the total number of participants across both groups minus two. With the Alpha level, degrees of freedom, and t-test value provided, a standard significance table was consulted to ascertain if the t-test value reached significance. The results of the analyzed data will be expounded upon in the subsequent section.

For this investigation, fluency was defined as the capacity to generate relevant responses, reflecting the ability to create various figural images. The fluency variable comprised 25 participants in the music group and 25 in the visual art group, totaling n = 50 participants. Concerning fluency within the music group, using pretest scores, the descriptive statistics yielded M = 55.51 and SD = 21.53910. Subsequently, for fluency within the music group using posttest scores, the computed statistics were M = 56.23 and SD = 20.86952. Consequently, the mean of posttest scores for the music group surpassed that of the pretest scores, indicating an improvement in fluency. When comparing fluency within the music group between pretest and posttest, assuming equal variances, the analysis showed no statistical significance between the two, with p = .835, t = .195, and df = 46.

Table 1: Group Fluency Pre and Posttest Scores

Group	M	SD	t	p
PreTest	55.51	21.53910	.195	.835
PostTest	56.23	20.86952		

Source: Authors computation using SPSS

The descriptive statistics for fluency in the visual art group indicated a mean (M) of 55 and a standard deviation (SD) of 22.10257 for the pretest. In contrast, for the posttest, the mean was higher at 71.12 with a standard deviation of 19.37330, suggesting an increase in fluency compared to the pretest mean.

Comparing the fluency scores between the pretest and posttest within the visual art group, assuming equal variances, the analysis revealed statistical significance (p = .033, t = 2.098, df = 46). This suggests a notable improvement in fluency following participation in visual art activities. This increase in scores points towards a positive influence of visual art experience on participants' creativity levels specifically in terms of fluency.

Table 2: Visual Art Group Fluency Pre and Posttest Scores

Visual Art Group	*M*		*t*	*p*
PreTest	55	22.10257	2.098	.033
PostTest	71.12	19.37330		

Source: Authors computation using SPSS

Conclusion

The analysis of data revealed a significant increase in scores from pretest to posttest among students in the visual art group across all categories. The quantitative findings of this study indicate a notable enhancement in creativity scores among students engaged in visual art instruction, evident in both specific test categories and overall improvement. Although the results are specific to the sample studied and may not be broadly applicable, the statistically significant outcomes suggest that visual art experiences can effectively cultivate creative thinking skills.

This study highlights a correlation between visual art exposure and the development of creativity in high school students, suggesting its relevance in preparing them for the competitive global landscape. Given the demonstrated positive impact of visual art on creativity, integrating it into the curriculum could substantially contribute to fostering creative abilities, thereby fostering positive societal change.

This research addresses a gap in understanding regarding curricular approaches proven to enhance student creativity. The insights gleaned from this data could inform parents about the benefits of visual art instruction and its positive impact on their children's creative abilities. Additionally, this information could support curriculum planners in ensuring that visual art education holds a central place in preparing students for an increasingly knowledge-driven society.

Recommendations

The following recommendations were proffered:

➢ Data ought to be disseminated among all stakeholders within the university to advocate for robust offerings in visual arts courses.
➢ Information should be communicated to parents in the community to underscore the significance of a robust visual arts curriculum in schools and the benefits it offers in their children's education.
➢ Students need to be informed about the importance of creative thinking skills in the evolving job market and the advantages that exposure to visual arts can provide in fostering such skills.
➢ It's essential to share data with educators across various disciplines and guidance counselors to elucidate the critical creativity skills nurtured through visual arts courses and initiate interdisciplinary dialogue to promote creative thinking initiatives.
➢ Utilizing the data, professional development coordinators can substantiate initiatives for faculty and staff aimed at raising awareness about the necessity of creative thinking skills and implementing activities to enhance them.

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