



Proceedings of the 37th iSTEAMS Cross-Border Conference – Accra Ghana 2023

Faculty of Computational Sciences & Informatics - Academic City University College, Accra, Ghana
SMART Scientific Projects & Research Consortium (SMART SPaRC)
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Creative Research Publishers – Society for Multidisciplinary & Advanced Research Techniques (SMART) Africa

**37th International Science Technology Education Arts Management
& Social Sciences (iSTEAMS) Cross-Border Conference - Accra Ghana 2023**

Creative Arts Education As A Foundation for Technological Advancement

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ABSTRACT

The creative arts have been a major catalyst for technological advancement. However, due to lack of synergy between creative arts education and technology, there has been a relegation of creative arts education, which has led to a comparatively less creative drive and advancement in technological output. This paper explores the role of creative arts education as a foundation for technological advancements by x-raying the definitions of arts and technology and also highlighting the historical role of creative arts in technological inventions. This paper suggests factors affecting the synergy between creative arts and technology and further suggests possible ways of making creative arts more productive technologically.

Keywords: Creative Arts, Technology, Education, Development.

Proceedings Citation Format

Ajayi, J.B. (2023): Creative Arts Education As A Foundation for Technological Advancement. Proceedings of the 37th iSTEAMS Multidisciplinary Cross-Border Conference. 30th October – 1st November, 2023. Academic City University College, Accra, Ghana. Pp 165-170. dx.doi.org/10.22624/AIMS/ACCRACROSSBORDER2023 V2P11

1. INTRODUCTION

As the cornerstone of technological advancement, creative arts education is essential to the evolution of society. The creative arts industry, with its emphasis on skill development, chances for self-employment, and substantial economic impacts, has been praised over and over again as the cornerstone of national progress.

Academics have stressed the creative arts' crucial significance in forward-thinking national advancements. The creative arts have been a catalyst for technological advancement as they foster an environment where technology and creativity are fully integrated and intertwined (Schiuma, 2017). The arts have been instrumental in pushing the boundaries of innovation, particularly in the digital era, where advancements in digital art and virtual reality have revolutionised artistic creation and expanded the possibilities of artistic expression (Simanjuntak, 2023).

However, the need for scientists, engineers, architects, and the like is better appreciated, embraced, and applauded by society than the need for creative arts designers. This erroneous stand has relegated the status of the creative designers to the background, whereas they provide the foundations on which these professionals build. Creative arts education and technology are not two parallel lines. Suffice it to say that they have been co-existing as one of the four environments within which man lives, right from the era of cave art. Natural, social, and cosmic are others.

The relationship between creative arts education and technological advancement is multifaceted. Digital technology has led to new forms of creative community and creation, and the intersection of art and technology has become an integrated creative medium. (Dyer, 2019). In essence, the creatively visualised and produced forms and designs (pictures and paintings) of the cave man depicted his desire and urge to survive. This survival based on his imagination might perhaps be taken as speculation behind the motivating force that enabled him to produce his tools for hunting and self-defence.

This is again in line with the philosophical belief that all physical materials (man's inventions) spring up from man's response to the use of his imaginative (creative) powers. These views are substantiated by Bush-Brown (1970), who says the major objective of education is to develop man's verbal, visual, and mensurate capacities for organisation and that urban development requires the joint contributions of urban designers, architects, sculptors, painters, landscape artists, sociologists, etc., providing the link between art and education and equally stressing the importance of creative arts in technological development. Wojnar (1978) views the creative arts as a manual of life that brings about much human actualization.

All the arguments so far can be corroborated with the position and submission of the 1988 International Society for Education through Art (INSEA) participants in Lagos that "without art and creativity, there is no technology; technology is a by-product of creativity."

2. TECHNOLOGY AND ART: DEFINITIONS

Art and technology are defined in different ways based on different interpretations. One perspective is that technology is human creativity directed towards usefulness, whereas art is human creativity directed towards goodness, beauty, and truth (Lee, 2022 and Woodbridge, 2017). Technology is historically derived from the Greek words *techne*, meaning art and craft, and *logos*, meaning speech.

Thus, the word “technology” to the Greeks means a discourse in the visual arts. However, this scope was widened in the middle of the twentieth century to include, as a phrase, the activity or means by which man seeks to change or manipulate his environment. Gomwalk (1922), for instance, sees technology along the same lines as “man’s systematic study of techniques for making and doing things to change or manipulate his environment.” The Oxford Dictionary (1985) defines technology as “systematic knowledge of the industrial arts, implying technical methods of achieving practical purposes. Technology implies those activities that bring alterations to the material world in an attempt to satisfy the needs of people. Technology is more than one thing. It is a projection of a number of conditions, aspects, and structures, of which industrialization is one. Some of the constituting elements are apparatus, tools, and machines, which produce material goods of different kinds through different methods and processes of production. It is pertinent to state here that technology reflects man’s enhanced ability to modify nature in a favourable way, thereby creating better room for answering his needs through the creation and provision of the desired design of his environment.

Art, as it is generally known, stands for expression of emotions, appreciation of beauty, creating pleasing forms, creating and experimenting with different materials, performing actions through demonstrations, etc. Herbert (1964) sees art as “an artificial object that elicits excitement of a mathematical or intellectual order based on sensations that might be of different degrees of intensity or quality.” Aniakor (1982) concludes that “no matter what the definition of art is, it must derive its vitality from the internal dynamics of the society to which it belongs.”. For the purpose of this paper, creative arts education is seen as a kind of functional education that combines and coordinates the use of the brain (head), the heart, and the hand in thinking, creating, appreciating, and evaluating. It is a purposeful education with strong visions guided by set goals and objectives and with quantifiable outputs in ideas and the use of materials. Supporting this view, Lloyd and Miller (1973) see creative arts education as education for life and living, education for innovation, for relevance, for creation, for production, for self-reliance, and for development.

The trend of development in creative arts education at present stresses the liberation of the creative potentials of human consciousness. This means that creative arts education falls within humanistic values. A lot of examples abound of the ways the creative arts (visual, liberal, and performing) have been manipulated through propaganda and censorship to the detriment of human consciousness. For instance, during Hitler’s (1889–1945) regime in Germany, information in visual and audio forms was restricted and censored for public consumption. The principal aim of creative art education, according to Brothwell (1968), is not solely production but stimulation. His view implies that creative arts education awakens the child to an enjoyment of art, which subsequently challenges his potential creativity. This stimulation forms the basis of the relationship between the child and his environment, the resultant effect of which is the urge to explore, investigate, compose, re-arrange, or produce new structure through the use and coordination of his sensory organs.

Knowledge of creative arts education is relevant and helpful to the discovery and nurturing of creative potential in our midst. Through such processes, technological breakthroughs are achieved. It should be noted that creative arts education does not necessarily produce

professional artists but aids in the production of connoisseurs, who in turn might contribute to the sense of perception of society by judging accurately the artistic qualities of designs that bring about technological inventions.

3. CREATIVE ARTS EDUCATION AND TECHNOLOGICAL DEVELOPMENT

As expressed earlier, technology is seen as a means or activity by which man seeks to change, restructure, or manipulate his environment. Creative arts education is the right tool that can enable men to achieve this purpose. It comes in the form of providing the base on which the technological aspect takes off. In short, it informs or originates the idea of whatever design is in the pipeline through imagination or inspiration for technology to produce. In the industrial sector, the designs of products are first conceived, expressed, or drawn on paper before undergoing mechanical production. The aesthetic input enhances the design in the same way that the scientific input is imperative to the working function. Though the freedom of aesthetic expression is curtailed by the intended functional purpose of the product, just as the aesthetic is influenced by function,. Leonardo da Vinci (1452–1519) is a historical example of the crucial role that creative arts education plays in the development of technological products. He was the first to give a graphical idea of a flying machine, and it took both scientists and engineers four hundred years to get his idea materialised (Uzoagba, 1982). Additionally, Talabi (1979) stated that an artist in AD 3 came up with the idea of a rocket to the moon.

Globally, there is no object or item without a form. And form, apart from being an important element of design, has always been and will continue to be part of the prerogatives of creative artists. All objects of our daily use, be they television sets, refrigerators, tables, chairs, fans, or automobiles, are all elements of design. Essential and basic aspects of life, such as clothing, shelter, transportation, communication, etc., would have been impossible without the application of creative arts education. Even the idea of agriculture is made easy through the creative use of modern equipment and materials. The problem with Nigeria as a nation is that creative arts education is not so encouraged and established. All cries have been on creativity in the form of technology, forgetting that the successes of later draw on the former.

However, it is a sharing news to read that rethinking, exploring and adapting possible opportunities and prospects towards creative industries in countries with transitional economies is witnessing a gradual increase (Bilan, Y. et al, 2019). It is hoped that this development in line with the position of this paper will change the status quo.

4. FACTORS AFFECTING SYNERGY BETWEEN THE CREATIVE ARTS AND TECHNOLOGY

There are many factors that can affect the synergy between technology and creative arts. Here are five factors that can affect this synergy:

Availability of Technology: The degree of technological accessibility has a big influence on how well technology and the creative arts work together. Artists may find it more difficult to experiment with and incorporate technical tools into their creative processes if they have limited access to them.



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Skills and Mastery: The degree of synergy between the domains of art and technology is largely determined by the skills and mastery of the two groups. Collaboration and integration can be more successful when there is a solid understanding of both the creative arts and technology.

Innovations: The ability to experiment and create with new technologies has a significant impact on how well the creative arts and technology work together. Synergy is more likely to be achieved by artists and technologists who are willing to push limits and explore new possibilities.

Resource Allocation: The degree of synergy attained can be influenced by the amount of money and time dedicated to the advancement and incorporation of technology into the creative process. Sufficient resources can facilitate the investigation of novel technologies and the creation of inventive artistic creations. Government policy: The interaction of technology and the creative arts can also be impacted by the regulatory and policy environment. Encouragement of cooperation and innovation through supportive laws and regulations can strengthen the synergy between the two fields.

5. CONCLUSION

The concept of technology may require science, but the imagery is art. Again, it should be recalled that technological products have to be designed by creative artists if they are to physically appeal to the public. Imperative here is the fact that the skill of the creative artist, his power of imagination and creation of what is original, and his ability to please consumers or the public through the aesthetic appeal of his forms or products are indispensable in a technological era.

Considering the above, it will be pertinent to state here that the approach to any life problem, either in the arts or sciences, needs a thorough grounding in the field of creative arts education. Suffice it to say that a creative pattern of thinking should be developed among Nigerians, for such a step has resulted in a technological boom in virtually all the advanced countries of the world today. It is worthy of note that the more technologically developed people become, the more artistic creativity they will require. To make this submission a reality, it is this writer's idea and suggestion that consideration should be given to the combination of the creative arts with the sciences. This is because some aspects of the creative arts have elements of science in their structure, which in turn will help the creative artists lay the foundation for technological products.

Again, the school curricula should be made more flexible to give more and better recognition and status to creative arts education. Based on its indispensable role in technology and in virtually all subjects in the school curriculum, coupled with the fact that it is the basis of life, creative arts education should be treated as a compulsory subject in the school curricula like English Language and Mathematics.



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