

CREATIVE AND FUNCTIONAL CERAMIC ART EDUCATION THROUGH CLAY: CHALLENGES AND PROSPECTS IN A COMATOSE ECONOMY

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Abstract

Clay is the main material for ceramic art education and it is very useful media for creative and functional production in the area for economic and societal development. Creative individuals are not only highly intelligent, but also score highly in of almost all kinds of tests. Creativity is defined in various perspectives by different authors but all arrive at almost the same meaning. The creative and functional contribution of ceramics education in the development of any society cannot be overemphasized. There are some challenges faced by the ceramic education currently which is hindering its relevance in the society as well also its prospects have been noted in this paper. Then how can creativity and functional ceramics art education be encouraged in schools through the use of clay. Examples of some functional creative products of ceramic art education have been included in the paper along with recommendation and suggestion

Ceramics or pottery means all objects of clay. Clays are sediments that range in size and are composed mainly of clay materials. Clay is the main raw materials for the manufacturing of ceramic products.

When clay is mixed with water, it forms a coherent, sticky mass that is readily moldable, if dried, it becomes hard and brittle and retains its sharp, but can again be made soft by the addition of water. If baked to a red heat, it becomes still harder and then is no longer susceptible to the action of water (Mode

and Amobi, 2006). Clay – Hydraste silicate of aluminum, a heavy, damp, plastic material that ‘set’ upon drying and can be changed by heat into a hard, waterproof material. Its properties are workability and retention to form clay is used for other things as well as pottery. Ceramically, it is used for brick, tiles, sanitary wares electrical insulators and as a filler in rubber and paper (Frank and Hamer, 2004).

Ceramics comes from the Greek Keramos meaning potters clay and the ware made from its, but it is used to describe non-clay refractories which are

changed or formed by heat and also many silicate products.

Ceramics became a subject of study during the late 19th century when courses were established in many European countries to train chemists and engineers specifically for the pottery industry. Previously the chemist and engineers had first gained their knowledge in other spheres and then been employed by the potteries (Frank and Janet Humer, 2004).

Ceramics as a field of study has contributed immensely to the technological advancement of the modern world. The concept ceramics have been viewed from different perspectives.

Ceramics as a field primarily concerned with the treatment of non-metallic minerals by various processes, including heat, to produce articles with aesthetic or utilitarian properties. The values of ceramics to include the production of house hold utensils like dining ware, home fittings such as glass, tiles, plumbing fixtures, bricks, cement as well as ophthalmic glass, electrical porcelain and other refractory products.

Igbinedion in (Alasa, 2005) defined ceramics as product manufactured which is inorganic and non-metallic. In spite of the expansion of the field, the volume of clay-based ceramics manufactured is much greater than that of the non-clay ceramics. The variety of ceramics products are enormous which include table ware such as cups, saucers, plates, bricks and tiles of all types, earthen ware, bone China and porcelain, acid resisting ware for chemical plants,

refractory and many others. Belington in (Alasa, 2005), ceramics or pottery means all objects of clay with or without the addition of other earthy minerals, first shaped, dried and then made hard and permanent by the action of heat from the potters kiln. All pottery no matter when or where it was made belong to one of these three main types, namely, earthenware, stone-ware or porcelain and that the difference are physical.

Alasa (2005) ceramics the use of moist plastic clay and/or other earthen mineral substances to shape on object which is left to dry, biscuit/glass fire to become hard, dense, glossy and permanent (Alasa, 2005).

Ceramic art work should please the viewer and the ultimate user as much as it serves some function in the home. If it will please the beholder, it must be in harmony and proportions and have natural attributes of beauty. The principles and elements of design in a dipper dimension to create originality of forms and other qualities that appeal to the potential users need to be employed on to pottery ceramic art. Art and Science need to develop products that appeal and satisfy the aesthetic and function specification of the public. The personality of any potter is hardly rigid when she/he approaches creative processes to produce works for the community he wishes to serve (Alkali and Ahuwan, 2014).

Measurement of creativity are; as stated by Guildford (1970) in (Ogbe, 2002) that there are four different ability that play different roles in creative operations which is the same for both divergent and

convergent thinking. The abilities are: Fluency, flexibility, originality, and elaboration. These characteristics need to be found in the products of ceramic for it to be the best for economic use and development of the individual and the society.

Every design must have functionality and thus, must justify the need for going into production. Any design without function is worthless (Umezurike, 2016). It must also have sense of creative input for meaningful native of the works.

Creativity

Creativity is the process and ability to bring to life anything new. It could also be regarded as the behaviour of people in inventing a new form, pattern, or idea into an already existing one (Ogbe, 2002). It is the ability to think in ways that are different from other people. It refers to the construction of what is new, and an arrangement that is basically a contribution from the individual. It involves both generating an idea and making it manifest, above all making something happen as a result. Creativity involves two things, which must be seen in an idea or in an object if they are to be termed creative. They are process and product. The process refers to the particular activity or experience, which goes on when one attempts to give meaning to an object. The product simply means the outcome of the meaning which we attempt to give an idea or a think. For example, ceramics artist should poses the feeling or vision of the form which is

indeed to produce. In the process of production, the artist excises critical control and can modify the material or medium of his work. The object product should be both novel and aesthetically valuable for the user.

New schools of thought advocate the production of ceramics that speak about myths, beliefs and idea representing a wide range of human activities. Akali (2009) observed the growing interest by most potters in the production of what he called “Non-pot” ceramics. These phenomena stressed abstract forms and the textural qualities of clay to illustrate literary ideas simply for the purpose of effectiveness in what ever pots were intended for. This development inspired potters all over the world to create a vast array of arresting ceramics that captures traditional and cultural scenes lending sources of information to Anthropologist, Archaeologist and Historians. The functionality of these pots presents decorative, commemorative, ritualistic and investigative synthesis for all categories of human beings. The creative ceramics involved in this, expressed themselves through a combination of various clays, unusual forms, unique approaches (creativity) and a variety of techniques to produce works with historic, cultural and political themes, thereby creating an enduring, excitement and subject works for investigation. Most of these works carry political and moral messages, for examples Akali’s works, Onuzulike, Omotoshe, James Ewule, Mamza among others. It has bought high level of intellectual content in the works of

ceramics sanitary or table wares designed for the house-hold use which is not intended to serve any other purpose than the various functions they perform in the home. Artists with intellectual background need to build a new art and national ideas in general. This is to encourage indigenous cultures and adopt motifs, symbols and themes from traditional Arts, Architecture, Oral poetry, Dance, Legend, Folklores, Myths, Philosophy and Religion. Works such as the “Dehumanization” by Alkali, the world of “illustration” by Omofasho, “Hard labour” by James Ewule, Peace and Unity by Mamza and Host of others credence to addition of creative functional Nigerian ceramic art education. The works give high level intellectual content as examples to students (artists) to develop their creativity capacity.

The introduction of Non-Pot ceramics brought about a rich confluence of inspiration and became a subject matters that become exiting sources of information to other aspects of learning. It produces works that speak about myths, beliefs and contemporary issues in our day to day life which offers great conceptual framework upon which academic discussions could be generated intellectually and educationally for creative and function perspectives. Alkali, (2009) stated that; Art generally is said to have the capacity of playing a corrective role in the society. Like religion, it could serve as the moral mirror of the society. Apart from ceramics being a house hold item, it serves as a vehicle for learning and studying man and his environment. It is

educational asset providing clues to Anthropologists, Archaeologists, and Historian and it is a means of expression and communication. The Psychological gratification and economic benefits are additional credits to its producers. Leach and Cardew in (Alkali, 2009) dig and process their clay and create glazes from raw materials. “A potter is one of the few people left who uses her/his natural faculties of heart head and hand in balance-a whole man”. Akinbogun in Alkali, (2009) noted the growing international recognition of ceramic raw materials and their outstanding engineering and technological properties suitable for varied applications.

Nigeria ceramists should focus on researches that will enhance the use and promote ceramic raw materials and the technology that will harness their potentials for product development.

Creativity is the process of coming up with ways of attaining the vision of the big picture. It is the process that binds ideas and innovation together (Adeboye, 2011). Creativity is new and valuable. Creativeness is a complex whole made up of basic creative abilities common to all field, but varying from field to field. Art Philosophy, Science, Religion common sense etc.

Creative is the ability to induce a novel, unique reality to the world. It tends to be used differently by different people. It is original ideas, (Ogbe, 2002).

Creative is a unique mental process needed only to produce something new, different, and original. Creativity is the capacity of persons to produce

composition produces, or idea of any sort which are essentially new or novel and previously unknown to the producer.

Creativity quality can be found in any form of human activity. A person can be creative in almost anything; cooking, carpentering, playing, football and even dressing (Palmer, 2004).

Creativity is the capacity to have new thoughts and to develop expressions unique in some kind of ways, usually, human Endeavours, such as art, music, literature and performance incorporate creativity to make impart in the society. Creativity is achieved from urge to investigate and this leads to achievements of results. Creativity can lead an individual or a group of individuals (guilds, co-operative societies, etc) to develop "wealth from waste" (Ojie, 2012). Education on the other hand is power. It makes the individual better prepared to cope with the challenges of existence. The human being can hardly exist without some level of creativity. Everyone needs creative abilities to be able to vary her/his environment. Individuals need creative abilities to perform their daily duties very well. Creativity is useful in a variety of disciplines for functional production for society. Creative and function products are of high value in artistic design in the society. As such ceramist needs to make input of creative aspect into their design and products to better the economy of the nation.

Value of Creativity

The product of creativity should be unusual as judged by certain standards.

A creative product may also be judged by its power to change reality, transformation of reality for something new.

Values of creativity can be found in what creative persons produce. It gives pleasure and satisfaction, rewards for development of personality.

Factors that Influence Human Development in Creative Art

These factors include an individual's manner of understanding perceptual organization, conceptual categorization of external environment, psychological issues in art, how they affect an individual growth in creative endeavors, relationship between intelligence and creative arts, social perception of art and growth.

Some of the Challenges Faced by Ceramic Education

There is no meaningful development that can take place successful in any nation without its favorable respond to it artist and industrial sectors by the governments. Some of the challenges is funding which is very vital instrument for the development of the industries - small or large scale industries. Others are lack of manpower, maintenance culture, accountabilities, and plan among others. There are also the lacks of proper foundation in schools to lead them to proper knowledge of what is suppose to be done appropriately because of some distractions in the society. For example Boko Haram situation which are felt across the nation. The situation can never anchor the mind of positive creative

situation for functional products for development to its society. So what do we do? Call for intensive research.

Art making a very helpful tool in building the confidence levels of traumatized persons and for rehabilitating distressed persons (children, adolescents, and adults). This is one reason for its use in many clinical settings with diverse populations and in non-clinical settings as well as in art studios and in workshops that focus on creativity, development, Arts competitions, Lectures, Seminars, Workshops, touring and exhibition. Such means can be used effectively to curtail the tide of anti-social behavior in Nigeria.

The government could found more of these activities and at frequent intervals in different states to promotes national awareness, responsible citizenship, character, development and self-reliance through participation in a range of art activities among the Nigerian populace (Ebeigbe, (2012). Art is a constructive medium of communication. It is an area where individuals are being trained in skill accusations to enable them produce functional and aesthetic products, when their creative ideas have been developed.

Studio Artists

Studio artist are to be encourage in tertiary institution so as to encourage the capacity of creativeness for functional productive. They are hard workers. They are brain worker and they can be creative and intellectually best. No civilized nation play with the education of art because of its importance. Teachers should make

remarkable effort in handling art in their own effects. Arts is God's given potentials to the nation. Interest of child needs to be developed on the creative aspect for the importance of art. Some Department Graduate Unemployed. On other hand artists are employers instead of employees. Artists are enterprises of self relocation. Policy makers are selfish. without the studio area, art is useless. Developing the mind creativity for function production is the developing nation. Art is one of the professions the human being cannot do without it. Remove art from technology-no-technology.

Functional Pottery/Ceramics

The first use of functional pottery/ceramic vessels is thought to be in 9,000BC. These vessels were most likely used to hold and store grains and other foods. When people hear the word Ceramic, they think of art, dinner ware, tiles, bricks, toilets and pottery. These products are commonly referred to as traditional or silicate-based ceramics. It is clear what these ceramics were used for the society firing pottery, the presence of calcium oxide containing sand combined with soda and the over firing of the pottery kiln may have resulted in a coloured glaze on the ceramic pot (Opoku, 2006). The producers of the products were and are of creative minds to be able think and come up with such ideas of producing functional products to the society for various purposes.

Most of the construction industries depend on the use of ceramic

materials. These include brick, cement, tiles and glass.

Advanced Ceramics

We have another class of ceramics called the “advanced ceramics”. It came on to the scene in the 20th century as the materials became more refined and special compounds and processes were developed for structural and electronic applications. These advanced ceramics are distinguished by their high chemical purity, careful processing and high values of the useful properties. Advanced ceramics, also known as engineering or technical ceramics refer to materials which exhibit superior mechanical properties.

The future success of both the traditional and advanced ceramic markets and developing non-traditional United States of America’s markets depend on factors such as increasing the quality applied, and reliability of the finished products improving the cost benefits ratio of ceramic components, increasing research and development, increased supply of domestic, high-quality raw materials and overcoming designer and end-user reluctance to use ceramics. The consideration of scientific, artistic and creative aspect those process and products are importance of the functional requirements for economic development of the society. Ceramic systems provide the necessary life functions of sensing, actuating control and intelligence of researches has been on and are still going on in these areas and more of the ceramics.

The development of new materials and applications will eventually touch the lives of everybody. In this era of rapid change in art, design and technology, there is need to consider the creative and functional aspects of produce products for the benefits of the society and for developmental purposes. Ceramists need to exploit the raw materials and adopt production techniques of the modern industries to boost the diversification of our industrial sectors for economic improvement and development. Research in the tertiary institutions especially the universities should be encouraged for these types of field for the actualization of scientific, industrialistic and creativity for functional products within its society.

Ceramic Art Education

Art education like Dewey, Lowen field and Britain, Eisner, Chapman and Mbahi in Mamza, 2010, suggest that schools should encourage children to explore and learn how to handle clay during their early states in primary education, since it is a traditional medium, found within children’s immediate environment and useful in producing, handcrafted items valuable to their society using producers that stimulates and promote their creative ability: Educators are encouraged to introduce simple but realistic processes and techniques that facilitates learning, and encourage expansion of creative growth in children in order for them to cope with the recent vast accelerated pace of technological growth in our society today (Mamza, 2010).

The Role of Ceramics in Education

The additionally, clay pots are creatively made for many purposes like cooking, storage, bathing among others. The practice is found across different ethnic group in Nigeria like in Kano, Abuja, Ilorin, Maiduguri and many parts of the country. Clay materials and its products are found in our homes and public places for different purposes. These products are creativity produced from clay materials include flint, feldspar and mainly (Kaolin) Clay. (Mamza, 2010).

Conclusion

From clay origins, the earthen ware and bricks, the ceramics have come a long way where today they seem to be poised to virtually revolutionized the modern living. Advancing, ceramists are going into more complex components. Material scientists are extending the benefits of ceramics for new applications with innovative techniques ideas for the innovation for functional purpose, to its communities.

The roles of raw material development has gained added importance to synthesis and to surge forward towards newer developments in ceramics. The Federal Institute of Industrial Research, Oshodi (FIRO) and the Raw Material Research and Development Council (RMRDC) were established purposely to pioneer developments in raw material testing and evaluation as well as the production of engineering products for functional purposes. Due to underfunding, low science and technological manpower, lack of scientific or appropriate research

laboratories, they were unable to meet the demands for these developments. As such, there is urgent need to argument and modernize in infrastructure facilities in these institutions to enable them to face the challenges of industrialization in this nation, Nigeria. Foreign participation in the development of standard research in laboratories in Nigeria will assist in upgrading existing technologies, creating innovations which can lead to improvements in quality, cost effectiveness and reliability of knowledge base on new realities in industrial research and development for the nation.

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