

## Original Paper

# Development of Graphic Design Practice and Education in Ghana

Dr. Eric Agyarkoh<sup>1\*</sup> & Dr. Eric Kwadwo Amissah<sup>2</sup>

<sup>1</sup> Department of Vocational and Technical Education, University of Cape Coast, Ghana

<sup>2</sup> Department of Graphic Design Technology, Takoradi Technical University, Ghana

\* Dr. Eric Agyarkoh, E-mail: eric.agyarkoh@ucc.edu.gh or kwajakvisual@gmail.com Tel: 024337268

Received: April 7, 2022

Accepted: April 23, 2022

Online Published: April 30, 2022

doi:10.22158/jecs.v6n2p71

URL: <http://dx.doi.org/10.22158/jecs.v6n2p71>

### **Abstract**

*In Ghana, Graphic Design is regarded as one of the contemporary arts that was introduced in the Gold Coast by the British (The colonial administration) and European merchants in the 17<sup>th</sup> Century. Since then, the art has gone through series of metamorphosis in various aspects till date. However, empirical evidence indicates that the developmental patterns of the art in Ghana has not been documented comprehensively. Using qualitative research approaches such as historical research method, interviews, document review, narrative and inductive analysis, this paper sought to conduct a comprehensive research into the local Graphic Design industry to gather pieces of fragmented documented and oral information from relevant stake holders who were purposively selected from different parts of Ghana based on their professional memory on industrial practice and Graphic Design education in Ghana, to reconstruct the history of the art for posterity. The study revealed that, commercial press printing and newspaper advertising were introduced in the Gold Coast first before outdoor advertising and desktop publishing. Also, colonisation, successive government policies, technological inventions in the western countries, and developments in computer technologies have contributed immensely to the development of Graphic Design practice and education in Ghana from the 17<sup>th</sup> Century to date.*

### **Keywords**

*Development of Graphic Design in Ghana, Graphic design practice, Graphic design education*

## **1. Introduction**

Graphic Design is a branch of Visual Arts that composes text, illustration and other visual elements such as colour, lines, shapes etc. based on certain visual communication principles to generate meaningful message to produce functional and aesthetically appealing artifacts such as posters, signage, flyers,

leaflets, brochures, catalogues, magazines, newspapers, manuals, textbooks, receipts, invoice, stamps, packages etc. to communicate to the public. This form of visual communication warns, directs, informs the public, or advertises an organisation, events and goods and services (Merriam-webster.com, 2020). The emergence of the information age and digital revolution in America in the 1960s has broadened the scope of the art to embrace other forms of electronic and digital communication media such as video, animation, audio and internet therefore transforming the art into an integrated communication medium described in modern parlance as multimedia (Society of Graphic Designers of Canada, 2020).

The scope of Graphic Design consists of different specialised vocations which are either practiced alone or integrated. Historically, the etymology of the profession can be traced from ancient Egyptian, Mesopotamian, Greek and other ancient global cultures (Getlein, 2002). Even though Graphic Design is taught and practiced in Ghana, it is regarded as exotic art because, it did not feature prominently in our indigenous creative arts practices before the arrival of Europeans in the Gold Coast (Amenuke, Dogbe, Asare, Ayiku, & Baffoe, 1999). Rank (2021) traces the genesis of Graphic Design in Ghana to the beginning of industrial printing in the Gold Coast in the 17<sup>th</sup> Century through the colonial administration. Since then, other forms of the art emerged in the country through globalisation, formal education and trans-continental trade (Advertising Association of Ghana, 2012).

A search by the current authors revealed that, Adusei (2004) has documented the history of art education in Ghana but his historiography did not comprehensively document Graphic Design education in Ghana. Owusu-Baah (2008) has also researched into modern advertising and sales promotion in Ghana which are aspects of the profession in Ghana. Eyiah has published a lot of Ghana's press history on Ghanaweb.com (2021), Rank (2021) for instance, has also done a lot of work on Ghana's press history.

It must be emphasised that, these works captured aspects of the history which are published separately. This situation has made the information scatted and fragmented in Ghanaian literature. To help solve the problem, the current researchers, decided to conduct comprehensive historical research into the developmental patterns of different aspects of the profession in Ghana from inception to date. The study also sought to identify the gaps in the existing literature and do extensive analytical reviews of the fragmented existing literature and subsequently use inductive reasoning, logic and critical thinking to reconstruct the history comprehensively to reflect the systematic developmental patterns that have characterised the holistic development of Graphic Design practice and education in Ghana and project it into the future.

## **2. Methodology**

The study design was situated in the interpretative paradigm which led to the adaptation of qualitative research approach and methods. The qualitative research approach was adopted because, it allowed the researchers to use flexible methods to gather, analyze and present primary data (Fraenkel & Wallen 2009). Also, because the study aimed at gathering pieces of information from experienced Graphic Design practitioners and educators in Ghana and complement it with findings from analytical reviews of

published literature to reconstruct the history of Graphic design practice and education in Ghana, the researchers employed a historical research method for the study.

To enable the researchers gather detailed information for the study, reputable Graphic Design related organisations and training institutions were purposively selected from different towns in Ghana and subsequently seasoned and experienced Graphic Design practitioners and educators were purposively selected from the organisations and institutions to constitute the sample population. These professionals included commercial signwriters, outdoor advertisers, electronic advertising agents, commercial printers, commercial desktop publishers and Graphic Design lecturers from Kwame Nkrumah University of Science and Technology (KNUST), Takoradi Technical University (TTU) and University of Education, Winneba (UEW). These participants were selected based on their long years of practice in the local industry and years of accumulated personal experiences and professional knowledge in their specialised Graphic Design vocations. The organisations were also selected because of their long years or sustenance in the local industry, scope of operations and level of technological development. Tables 1 and 2 respectively indicate how the organisations and participants were selected for the study:

**Table 1. Selections of Graphic Design Related Organisations for the Study**

Category of Organisations Used for the Study	Number Selected from Towns						Total No. of organisations used
	Accra	Kumasi	Takoradi	Cape Coast	Winneba	Agona Swedru	
Small-scale sign writing shops	1	2	2	2	-	1	8
Large-scale outdoor advertising Companies	2	-	-	-	-	-	2
Commercial press houses	4	1	1	1			7
Desktop publishing shops	1	1	1	1	1		5
Electronic advertising agencies	2						2
Tertiary Graphic Design Institutions		1	1		1		3
Total Number of organisations used for the Study= 27							

*Source:* Field work, 2021

**Table 2. Sample Distribution Table**

Category of Participants	Number of Participants Selected from Towns					
	Accra	Kumasi	Takoradi	Cape Coast	Winneba	Agona Swedru
Small-scale sign writers	1	2	2	2	-	1
Large-scale outdoor advertisers	2	-	-	-	-	-
Commercial printers	4	1	1	1		
desktop publishers	1	1	1	1	1	
Electronic advertising agents	2					
Graphic Design educators		1	1		1	
Totals	10	5	5	4	2	1
Totals Number of participants used for the study =27						

*Source:* Field work, 2021

Internet and book search, face-to-face interviews, documentation and still-picture photography were used to gather primary and secondary data for the study. Different search engines were used to search for pieces of published documents on the history and pieces of relevant information were also retrieved from books. The researchers also visited the participants at their work places on different occasions to engage them in face-to-face interviews, observe their operations and level of technological development of their shops or companies and took relevant pictures of some of their works. The responses were also recorded electronically. However, interviews that were not permitted to be record electronically were hand written. Based on the objectives of the study, the conversations with the participants were focused on oral accounts they obtained from their masters, teachers, and predecessors, and personal experiences and knowledge they gathered in the industry through practice and observation over the years they have practiced in the local industry.

To ensure trustworthiness and good ethics in the study, the researchers formally identified themselves as Communication/Graphic Design lecturers from University of Cape Coast and Takoradi Technical University with their university identity cards to the participants, briefed them about the objectives of the study and orally sought their consent to participate in the study. The researchers assured them of respecting their privacy and ensuring their anonymity and confidentiality of their responses in the study, which they consented to and participated in the study. These ways of ensuring trustworthiness in qualitative research are recommended by Silverman (2001), Pitts (1994) and Guba (1981).

The responses of the verbal interviews, and pictures and information obtained from field studies were analysed qualitatively to reflect the ontological and epistemological stance of the study. Information obtained from internet and book sources were also reviewed critically and analysed to induce relevant facts which were used to complement the oral information to reconstruct the history. The researchers used thematic analysis, document study, narrative analysis, inductive and logical reasoning to analyse the data.

### 3. Analysis, Presentation and Discussion of Findings

All the narratives obtained from the participants on the field study were transcribed and read critically several times for better understanding. The field notes taken during the observations were also expanded and relevant facts gathered from the analytical literature reviews were also synthesised and analysed. The photographs taken from the field were edited and relevant ones sifted for the study. Based on the findings that emerged from the data analysis, patterns of development were identified as codes which were used as clues to reconstruct the history. To ensure the privacy, anonymity and confidentiality of the identities and responses of the participants in the study, the researchers did not use the actual names of every participant in the manuscript unless those who consented to it. The findings were presented, analysed and discussed to cover the chronological developments of the following aspects of Graphic Design practice and education in Ghana:

#### **Chronicle of Developmental Patterns of Commercial Printing in Ghana**

Review of the report of Rank (2021) revealed that, the first colonial newspaper, *The Gold Coast Gazette and Commercial Intelligencer*, was published from 1822-1825 by Sir Charles McCarthy, governor of the British Gold Coast settlements. As a semi-official organ of the colonial government, the central goal of this Cape Coast newspaper was to provide information to European merchants and civil servants in the colony. Recognising the growing number of mission-educated Africans in the Gold Coast, the paper also aimed at promoting literacy, encouraging rural development, and quelling the political aspirations of this class of native elites by securing their loyalty and conformity with the colonial system.

Rank (2021) reportage further indicated that, the publication of this newspaper generated interest in most of the educated local people. By the middle of the century, thus 1857, Charles Bannerman (son of a British Lieutenant Governor and a prince from the Asante royal family), published a handwritten newspaper called *The Accra Herald* which was circulated to some 300 subscribers of which two-thirds of them were African educated elites. This paper lasted for 16 years. The success of Bannerman's paper stimulated a proliferation of African-owned newspapers in the late 20th Century, among them were Gold Coast Times, Western Echo, Gold Coast Assize, Gold Coast News, Gold Coast Aborigines, Gold Coast Chronicle, Gold Coast People, Gold Coast Independent, and Gold Coast Express.

One of the seasoned commercial printers claimed in an interview that, by 1870s some newspaper publishers had started using letter press in their operations. Some of the first printed local newspapers were Christian Messenger, the examiner, and the reporter which were edited by Reverend Thomas Birch Freeman and H. Wharten. Eyiah reported in an international featured article on Ghanaweb.com (2021) that, the first Ghanaian to set-up a pure press house in the Gold Coast was James Hutton Brew, a native of Abura Dunkwa in the Central Region. The press house was set-up in 1874 at Cape Coast. He published a bimonthly newspaper called Cape Coast Times and another fortnight newspaper called Western Echo. Sebbeh (2003) also reported that, an English lawyer called W. C. Nibblet published the Gold Coast Assize (court) in 1883 and the Gold Coast News in 1885. Reverend S.R.B. Attoh Ahoma produced the Gold Coast Methodist which was later turned to Methodist Times in 1886 and established another

newspaper known as Gold Coast Aborigines. Between 1890 and 1898, Attoh Ahoma had another newspaper called Gold Coast Chronicle. Another Cape Coast based renowned lawyer John Mensah Sarbah also had a newspaper called the Gold Coast People, and before the end of the century, Timothy Laing started the Gold Coast Express.

Eyiah reported again on Ghanaweb.com (2021) that, the beginning of the 20<sup>th</sup> Century started with the Cape Coast leader, which existed from 1902 to 1903. The people associated with this paper were Attoh Ahoma, John Buckman, Gaddiel Acquah and J. E. Casely Hayford. The editor was John Mensah Sarbah. In 1932 another newspaper called Gold Coast Observer was published by C. H. Benjamin.

Newspaper advertising was introduced in Ghana between 1930 and 1937 by a newspaper called African Times which was edited by J. B. Danquah. In fact, the period between 1930 and 1937 is referred to as the ‘golden age of newspaper publication’ in Ghana because, it experienced a proliferation of newspaper publications in Ghana which was as a result of increased political activism by the local elites. Eyiah further reported on Ghanaweb.com (2021) that, A. J. Ocansey imported a whole assemblage of press from Britain and Germany to set up a press house and published the African Evening Post which was edited by Namdi Adzikwe.

Frustrated in their attempts at exercising political power within the colonial order, indigenous elites became increasingly opposed to colonial authority in the early 20th Century. The gentlemanly dialogue of 19th Century newspapers transformed into full-blown anti-colonial protest in the newspapers of the 1930s. Newspapers demanded that citizens be given political rights, improved living standards, and self-government. As the political agenda of Gold Coast journalism radicalised, newspapers began reaching out beyond the circle of elites, appealing to rural leaders and the urban poor with a more accessible language and fiery oppositional outcry.

The return of Kwame Nkrumah to Ghana in the 1940s heightened the euphoria for political activism among the local people. In 1948, Kwame Nkrumah and his compatriots set up a press house and were circulating the Accra Evening News, Morning Telegraph and the Daily Mail. These publications stated the views of the Convention People’s Party (CPP). Largely written by party officials, these inflammatory newspapers incessantly repeated the popular demand for “Self-government Now!” while launching angry attacks against the colonial government.

In order to defuse the political and intellectual discuss constantly propagated by the local elites through the local media against colonial domination and oppression, the London Daily Mirror Group, headed by British newspaper magnate Cecil King, established *The Daily Graphic* in 1950. The *Daily Graphic* sought to maintain a policy of political neutrality, emphasising objective reporting by local African reporters. With its Western origin, *The Daily Graphic* sought to position itself as the most professional newspaper in the Gold Coast at the time.

After Ghana has gained independence in 1957 and the subsequent attainment of republican status in 1960, His Excellency, Kwame Nkrumah (Prime Minister and later President) orchestrated a state information apparatus through a hierarchical network of institutions, including the Ministry of Information, Ghana

News Agency, Ghana Broadcasting Corporation, and his own press, Guinea Press Limited that published two daily newspapers, one free weekly, and several specialised publications. One of these Nkrumah's own *Evening News*, became a "kind of *Pravda* of the CPP," dominated by party news and adulations of Nkrumah.

Rejecting the commercialism of the private press as politically irresponsible, Nkrumah harassed the remaining private papers and eventually purchased *The Daily Graphic* in 1963, incorporating the paper into his state apparatus. The Kumasi-based *Ashanti Pioneer*, founded in 1939 by John and Nancy Tsiboe remained defiant in the 1950s and early 1960s, animated by regional opposition to Nkrumah. After repeatedly subjecting the paper to censorship, eventually Nkrumah shut down the paper in 1962. The editor of the *Ashanti Pioneer* was detained for seven months and the city editor spent four and half years in detention in Fort Usher Prison for criticism against the government.

In 1966, Nkrumah was overthrown by a military coup lead by the National Liberation Council (NLC). In contrast to state domination under Nkrumah, NLC took a more libertarian approach to the news media: releasing independent journalists from prison, closing down the more blatant instruments of state propaganda, and lifting forms of censorship and bans on foreign journalists. However, most media houses were then owned by the state and therefore obliged to change their editorial positions overnight, extolling the virtues of Nkrumah and African socialism one day, then lambasting the violence and corruption of his regime the next. While the leader of the military junta, NLC publicly encouraged constructive criticism and the free flow of information, the main newspapers continued to experience indirect forms of state patronage and influence.

Upon seizing power from President Hilla Limann in 1981, Flight Lieutenant Jerry John Rawlings initially suppressed press freedom in Ghana because of his zeal in promoting the revolutionary ideals of his military ruling government (i.e. Provisional National Defence Council) (PNDC) while on the other hand, whetting up popular enthusiasm for the participatory projects of the state. Throughout the 1980s, the state media apparatus applied a variety of techniques of official and unofficial censorship, including repressive laws, public intimidation and harassment, bans on oppositional publications, and arrest and detention of dissident journalists. In order to avoid state harassment, many newspapers avoided politics altogether and focused on sports reporting instead. In 1992, Ghana returned to democratic rule with the ratification of a new constitution. Rawlings was twice elected President, first in 1992 and then again in 1996. In the democratic dispensation, Rawlings lifted the newspaper licensing law, allowing for the reemergence of the private press in the early 1990s. Newspapers such as *The Independent*, the *Ghanaian Chronicle*, the *Free Press*, and *The Statesman* and others reemerged.

Despite the suppression of the press by Rawlings, the free-market policy he introduced in 1983 as part of the Economic Recovery Programme enabled the private commercial printing houses to import press equipment to boost their activities (AAG, 2012). In fact, from the 1990s to date, newspaper and commercial printing in Ghana have developed to a level that is almost comparable to the west. This dramatic improvement could not have been possible without influence from the west.

The inventions of letterpress printing by Johann Gutenberg in about 1450 (Dennis and Jenkins, 1991), lithographic printing by Alois Senefelder in 1789, still-picture photography by Joseph Nicephore Niepce in 1826 and half-tone photography by Stephen H. Horgan in 1875 in Europe (Adams, Faux & Rieber, 1988) and (Getlein, 2002) introduced a dramatic improvement in industrial printing in Europe during the industrial revolution. These inventions spread rapidly to the west and Asia as well as some countries in Africa. As a British colony, these technologies were imported into the Gold Coast by state missionaries and private commercial press houses to boost the quality and quantity of their operations, since letterpress which was the predominant printing process at the time had a lot of limitations. For instance, with letterpress printing, a set of movable types which are kept in California job case are composed to develop the textual contents of printed materials termed as *forme*, which is then secured in the bed of the press (either platen or flatbed) and is inked by rollers when the platen is closed, it brings the paper into contact with the *forme* under pressure (Campbell, 2005).

All the seasoned personnel in the local printing industry interviewed lamented that, the letterpress process was very cumbersome and slow that only few pages of a book could be printed. The quality of the impression was also substandard and the process could not print photographs and illustrations so, pictures in books were drawn by illustrators and prepared into blocks either by etching or engraving and stamped into the printed books. The seasoned local printers unanimously agreed that, the liberalisation of press activities in Ghana by the NLC after the overthrow of President Kwame Nkrumah in 1966 and the subsequent introduction of the free-market policy by the then PNDC government in 1983, set the pace for massive commercial printing in Ghana. This fact has also been acknowledged on [ghana.mom-rsf.org](http://ghana.mom-rsf.org) (2021).

The findings also revealed that, some state and missionary commercial press houses such as Graphic Corporation, Times Corporation, Presbyterian Press, Adventist Press, Saint Francis Anglican Press and others. imported single unit offset presses from abroad. Graphic Corporation (Accra) and Saint Francis Anglican Press (Takoradi) for instance, imported process cameras, plate makers, lithographic plates and chemicals from Europe which they used to process full colour images to half-tone copies through colour separation and used pre-sensitised plates, plate developers, Gum Arabic etc. to develop them into image carriers and fixed them on the plate cylinders of the off-set press for impression (Kipphan (Ed.), 2001). This fast-printing equipment increased the quantity of their productions and quality of impressions. These press houses and others monopolised lithographic and colour printing in the local industry for some years until the 1990s when other large private printing houses such as Buck press (Accra), Type company (Accra), Tita Printing Press (Kumasi), Best Setter (Kumasi), Combet Impressions, New Era and GrafiTec all in Accra and others, also imported similar equipment and chemicals from Europe to break the monopoly.

The conversion of Graphic Corporation to a public limited liability company (Graphic Communication Group Limited) in the 1990s widened the scope of its commercial activities which lead to the establishment of a package printing unit within its setup. As a result, the press house imported a flexographic press together with flexographic plate maker and materials into the country. The press house



also imported a high-capacity large multi-section off-set press called the ‘speed master’ which in a single feed could print four colours, a spot colour and lacquer and dry it before delivery. The press also has a web-fed system in which the printing paper is fed from a revolving web continuously into the printing unit for impression and rewind on a revolving drum upon delivery.

The introduction of these equipment compelled some of the large private commercial press houses to import similar equipment and image setters into the country. The image setter is an improved form of process camera which is networked with a high-speed personal computer where the designed image is input straight by the designer which separates the colours unto laser films before it is exposed in a plate maker. Nowadays, laser printers are also used by some of the press houses to do colour separation. Recently, Type Company has imported a modern sophisticated speed master which has the ability to perform press and post-press activities in a single feed. For instance, apart from printing four colours, a spot colour and lacquer, and dry the printed material, it can also trim and fold the printed material before delivering for gathering, insertion and binding. The speed master can also print many pages in a second. Also, different kinds of pre-sensitized lithographic and flexographic plates are used in the local printing industry. Figures 1 and 2 are pictures of some modern equipment used in the local printing and publishing industry in Ghana:



**Figure 1. Some of Book Binding Equipment Used in Ghana**

Source: Fieldwork, 2018



Image Setter

Modern Off-set Lithographic machines

**Figure 2. Some Modern Colour Separation and Off-set Lithographic Presses Used in Ghana**

Source: Fieldwork, 2018

The findings also indicated that, the introduction of computer-generated graphics in the local printing industry in the 1980s have improved the quality and quantity of designs produced by the local press houses. Initially, software such as MS word, Publisher and Corel Draw were used, but as the technology improved in the country, modern software such as Page Maker, Quark Express, In-design, and Adobe Illustrator and Photoshop were introduced and are massively used in recent times. All of these have improved the quality of typesetting, image editing and page layout design in the local printing industry. At the moment, some of the leading commercial press houses such as GrafiTec, Graphic Communication Group Limited and others use Macintosh computers for designing. Finishing activities such as binding, laminating, scoring, perforating and others have also improved tremendously in the local industry in the past decade due to the importation of modern binding equipment by many press houses.

The findings further revealed that, the trade liberalisation and the free market policies, as well as the repeal of the criminal libel law by the PNDC and New Patriotic Party (NPP) governments in 1983 and 2001 respectively provided the impetus for the proliferation of many 'Jobby press houses' (Small-scale commercial press houses) in many places in the country. In Kumasi and Accra, Asafo and Newtown respectively, are known to be the hub of commercial printing activities. It also emerged from the findings that, the policies have helped to attract a lot of foreign investors from China, India and other countries into the local commercial printing industry who have introduced modern sophisticated printing equipment and materials, therefore creating a keen competition in the industry. This competition has improved the quality, quantity and services of the local printing industry which is gradually marching up with international standards. There is no doubt that with these favourable economic policies in place, Ghana's local printing and publishing industry will continue to grow to a higher pedestal to improve many sectors of our national economy.

#### **Development of Desktop Publishing in Ghana**

Desktop publishing according to Breckhuizen (1992, p. 127), "Is a process of combining text and graphic into a page layout using a computer, a printer and special software". In other words, it includes the use of personal computers and simple office machines such as ink-jet, laser, xerographer, scanners and comb binders to generate and organise graphic elements to produce a graphic communication item.

The finding revealed that, desktop publishing technology started in Ghana in the 1980s when personal computers and office printers were imported into the country by government and some private organisations as data processing equipment in offices. This technology gradually replaced the manual and the electronic typewriting systems that had been used in Ghana for decades. By the middle of 1990s many businesses and individuals had embraced the technology into their operations and activities. Many proactive youths especially stenographers, office clerks and secretaries developed strong interest in the technology and purchased Pentium two computers and used them for their personal data processing activities at home. Gradually, few people set-up small-scale commercial data processing shops, locally called 'Business Centres' in kiosks and rental offices in urban centres in which they typed and printed long essays, wedding and engagement programmes, pamphlets, examination papers, individual documents, etc.

Initially, Dos and Microsoft word were the predominant software used by such shops. The heightened desire in desktop publishing in the country encouraged some smart people to set-up private computer schools which were heavily patronized by a lot of Junior High School and Senior High School leavers, office workers and entrepreneurs. Some of the graduates from these schools were employed by private firms and institutions as data management staff and others raised capital to set-up desktop publishing shops, and most of these shops were sited at the campuses of tertiary and professional institutions. As the industry continued to grow, some of the shop owners stepped-up their exploration for other data processing and design software such as MS Publisher, Page Maker and Corel Draw. They also purchased different kinds of clip arts and started incorporating graphic designing into their operations by designing funeral posters, complimentary cards, invitation cards and others for individuals.

Due to the high rate of computer illiteracy in Ghana at the time, the small-scale desktop publishing shops continued to experience massive patronage of their services and this led to proliferation of such shops all over the country especially on the campuses of educational institutions. From the early part of the year 2000, many of these shops had purchased complex coloured multi-purpose high capacity xerographic, laser printers, etc. and personal computers to boost the quality and quantity of their services. One of the seasoned commercial desktop publishers said in an interview that: “Nowadays, some desktop publishing houses have incorporated photo-editing and modern typesetting software such as Adobe Photoshop and Adobe illustrator, Quark Express and In-Design in their operations. Some have also introduced ristographic and lithographic printing into their operations”. Based on the emerging facts from the narratives of the participants and the observations of the researchers on the field, the researchers can infer that currently, desktop publishing in Ghana has grown to a level of sophisticated industry that is competing favourably with small ‘Jobby’ press houses in the commercial printing industry. Figure 3 indicates some desktop publishing equipment used in Ghana:



**Figure 3. Some Desktop Publishing Equipment Used in Ghana**

*Source:* Fieldwork, 2018

## **Development of Outdoor Advertising in Ghana**

Outdoor advertising refers to any advertising done outside that publicises a business, its products and services. These works include sign boards, sign posts, bill boards, banners, wall branding, vehicle branding, etc. (entrepreneur.com, 2021 & Tuckwell, 1992). The art of outdoor advertising which in the view of Amenuke et al. (1999) is a contemporary Ghanaian art which started as a craft in the Gold Coast in the early part of the 20<sup>th</sup> century. It was started by a number of young Ghanaian educated and talented Visual Artists who through years of training as art students at Achimota school and other colleges applied their skills and knowledge in drawing, painting, lettering and designing to produce signage and posters for institutions, individuals, theatre houses and dance bands. Through the flexibility and adaptability of these artist, the craft developed to become a local craft popularly known as “sign writing” after some years of practice and was heavily patronised by the public and state agencies.

The narratives of the participants revealed that, initially, the craft was dominated by painters who had the flair of making realistic rendition of images and imaginative composition of scenes and events and added few hand-painted text as captions to amplify the paintings. In the civil service and force works for instance, the British imported metal stencils of letters from Europe which were composed by artisans to form words and sentences and dubbed with emulsion paints and stencil brushes when writing signage. Also, logos of state institutions such as the Ghana Armed Forces, the Police Force, and others were imported from Europe as finished works on metal plates (Advertising Association of Ghana, 2012).

Through the creative prowess of the artisans and the sign writers, they imitated these designs through continuous practice which led to the development of paper stencils by the sign writers who traced the letters from the metal stencils unto hard papers, cut with sharp knives and dubbed with stencil brush and emulsion paints. The craft of sign writing also improved when the British introduced Painting and Decorating Craft at the then Takoradi Technical School in 1956, later Takoradi Polytechnic, 1996, and now Takoradi Technical University, 2016.

The curriculum consisted of lettering and sign writing, drawing and designing and domestic, structural and decorative plain painting (City and Guilds of London Institute Painting and Decorating Advanced Craft Syllabus, 1988). The products of this programme were taught by experienced British master painters and sign writers so they could construct letters to their precise shapes and sizes and paint or cut them to paper stencils. The British also imported a lot of sign writing and plain painting tools, equipment and materials to resource the Painting and Decorating department and this motivated the students to learn faster.

The products of the programme were employed as sign writers and plain painters in state institutions such as Public Works Department (PWD), State Housing Corporation (SHC), the force works, educational institutions and others. These employees also took small commissioned jobs from individuals and organisations. Gradually, the sign writers’ and the painters’ learned from each other through continuous observation and practice and a few of them who were entrepreneurial minded set-up small-scale commercial art shops in some of the commercial towns in Ghana. An interview

conducted by the researchers with a number of old small-scale commercial art shop owners in the Sekondi-Takoradi and Cape Coast Metropolis respectively, in May, 2021 revealed that, the first commercial art shop set-up in the metropolis were 'Max Art Works' and 'Your Choice Art Works' respectively. The findings also revealed that, Mark Anthony, (a renowned prolific painter and sign writer) owned the largest commercial art shop in Agona Swedru and was the leading producer of concert party boards in Ghana in the 1970s.

The establishment of the commercial art shops attracted a lot of enthusiastic talented and non-talented young men to enroll as art apprentices in these shops who learned and imitated the skills of their masters through keen observation and practice. Few years later, some graduates from these shops also set-up their shops in other places and gradually the craft spread to many towns in Ghana.

The findings revealed that, by 1970, most of the signboards and billboards produced in Ghana were predominantly painted wooden signs. As the industry developed, different kinds of materials were explored by the sign writing shops and these led to the introduction of metal signboards where the entire substrate of the prepared metal was pasted with a sticker and then letters were set-out in reverse on large sticker sheets of contrasting colour to the letters and cut out into letter templates and pasted onto the base sticker with the help of soap solution to form the copy. Multi-colour vector images such as illustrations and logos were also set-out on bond sheet and the colours separated before they were transferred onto the sticker in reverse. They were cut out to template and carefully pasted onto the background sticker to achieve perfect registrations at the ends without creating gaps. This signage technology was used massively for commercial and institutional signs, signposts and car number plates. After metal-sticker signs, two other types of signage technology emerged in Ghana in the 1990s which were popularly called 'Neon signs' and 'Perspex signs'. With these technology, Perspex sheets (light rigid plastic sheets in various colours) were used as the support on which cut out sticker letters of contrasting colour(s) to the Perspex were pasted with the help of soapy water. The Perspex sheets were also cut into 3D letter forms and fixed unto a Perspex support with a strong glue. After that the sign was fixed into aluminum or galvanized metal frame and a number of fluorescent tubes were fixed into the frame and enclosed by riveting. The light was lit by electricity at night which brightened the sign from inside to make the text conspicuous. Neon signs were also used mostly for institutional and commercial signs as well as disco signs. Around this period 'Kwepa Signs' located at Pedu in Cape Coast and a freelance sign writer called Mr. Koufie were the leading producers of sticker and neon signs in Central Region. Other outdoor advertising companies such as Afro Media, Digital Display Publicity (DPP) and Apple Pie were some of the leading producers of these signs in Accra. In Kumasi, Bluemich Signs at Bantama was the leading producer of neon signs. In Sekondi-Takoradi, Ben Art, 2 Guys Artworks also dominated the production of these signs in the 1990s.

An interview with a seasoned commercial sign writer at Cape Coast in October, 2021 revealed that, until 1970s, production of banners were done by setting out the letters direct unto the fabric stretched unto large plywood or plastered cement wall and then the letters were filled-in with pure bristle

lettering brushes. Illustrations on banners were also drawn direct on the fabric and painted with oil paint or textile inks. In the later part of the 1970s, some Painting and Decorating graduates from Asuansi Technical Institute and Takoradi Polytechnic introduced paper stencil printing in the production of banners. In Cape Coast for instance, Mr. Ishmeal Minnow, owner of Modern Art and Design Services (MADS) is reported to be the first commercial sign writer to produce banners with paper stencils. Because of the accuracy and neatness of the process, many sign writers learned the skill and started incorporating it in their operations.

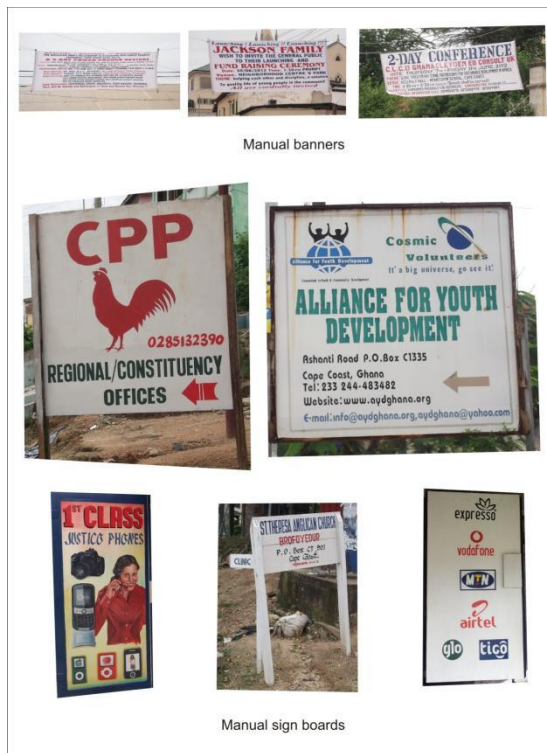
The analysis also revealed that, the introduction of Information Communication Technology (ICT) and digital printing in Ghana about two decades ago has transformed the local outdoor advertising industry tremendously. Some of the traditional sign writing shops that adopted the technology early have moved away from manual rendition to digital rendition. Nowadays, most of these shops use personal computers to produce their T-shirt designs and print them out with laser or ink-jet printers before developing them to screens for printing. Also, there are image setting equipment that separate full colour bitmap images into half-tones onto laser films before developing them to screens for printing. Bitmap software such as Adobe Illustrator and Photoshop are mostly used to separate full colour images to half-tones.

Apart from manual screen-printing, there are heat transfer printing machines that are used to print coloured designs into fabrics. Many screen-printing shops such as Appointed Time Screen Printing, Screen-tech and others have imported screen printing equipment that print faster and accurate than the traditional screen-printing processes. Again, a number of outdoor advertising companies have imported large format digital printers and materials that can print computer generated designs onto Polyvinyl chloride (PVC) sheets, flexy fabrics and stickers. Because of these modern technologies, most sign writing shops and large-scale outdoor advertising companies design their banners, signboards and billboards and print them with large format digital printers onto stickers and flexy sheets and stick or fix them onto metal frames. The flexibility in designing and producing digital signage makes them very attractive since well-edited realistic pictures can easily be incorporated to enhance the beauty and effective communication of the signage.

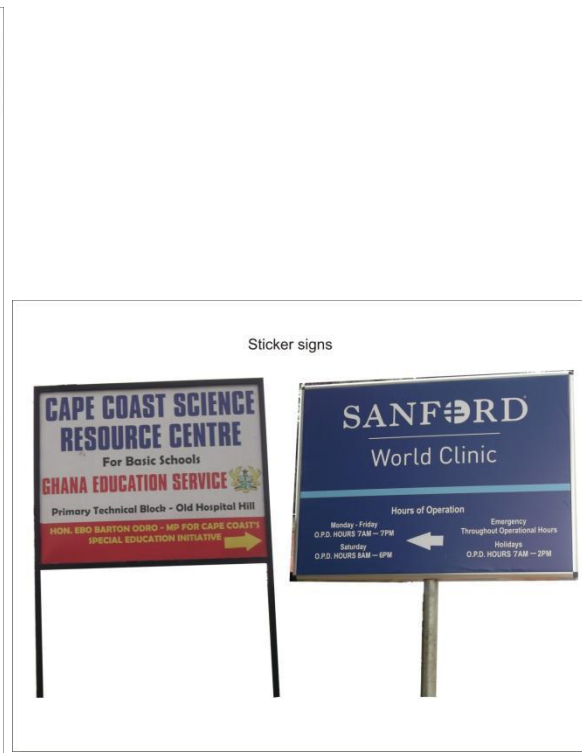
Presently, there are a number of digital outdoor advertising agencies in Ghana who are contributing significantly in the marketing industry. Notable among them are DDP(Accra), Alliance Media (Accra), Apple Pie (Accra), Taxi Ads (Kumasi), Footprint Solutions Inc. (Accra), Impact Artworks (Accra), Artlyn Advertising Ltd. (Accra), Gerofix Rent-A-Sign Ltd. (Accra) etc. Gerofix Rent-A-Sign Ltd. Ghana for instance, produces digital signage such as commercial signs, billboards, slip signs etc. (gerofix.net, 2021) Alliance Media also produces different kinds of digital outdoor advertising works such as airport advertising signs, mail media advertising, transit advertising, stadium advertising, landmark advertising and others (alliancemediacom 2021).

At the moment, the most complex outdoor advertising technology in Ghana is 'trivision' signs in which a computer-generated graphic design(s) is cut into strips to correspond to the size of a number of

triangular, square etc. shaped metal rods unto which the strips of designs are pasted and arranged sequentially to butt and timed. The metal rods are connected with electricity which cause them to revolve in synchronisation to each other when the light is switched on to display the design. Figures 3, 4, 5, 6, 7, 8 and 9 respectively are pictures of outdoor advertising equipment and works used in Ghana:



**Figure 3. Manually Painted Signage Produced in Ghana till 2000**



**Figure 4. Sticker Signage Produced in Ghana till Date**

Source: Field work, 2021



**Figure 5. Perspex and Neon Signs Produced in Ghana Currently**



**Figure 6. Digital Signs Produced in Ghana Currently**

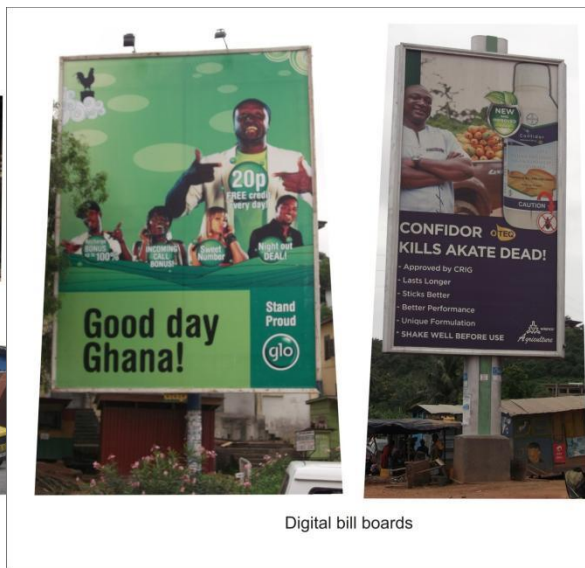
Source: Field work, 2021





**Figure 7. Digital Banners, Posters and Vehicle Branding Produced in Ghana Currently**

Source: Field work, 2021



**Figure 8. Digital Billboards Produced in Ghana Currently**



**Figure 9. Large Format Printing Machines Used in Ghana**

Source: Field work, 2021



### **Development of Electronic Advertising in Ghana**

Electronic advertisement in this context refers to multimedia advertisements that combine text, still-pictures, illustrations, videos, sounds and animation. This form of advertising emerged when television technology was introduced in Ghana in 1965 at Ghana Broadcasting Corporation (GBC) to inform and educate the citizenry (pressreference.com, 2021). Though President Kwame Nkrumah prohibited commercialisation of GBC for years, financial difficulties compelled GBC to set-up a commercial unit in 1967. Some of the TV and Radio presenters at that time used their experience in TV broadcasting and script writing to produce TV and radio commercials for clients at a fee and placed them on Radio 2 and GTV. Some of the pioneers of TV commercial production in GBC at the time are Mr. Jake Otanka Obetsibi Lamptey, Mr. Bill Marshall, Mr. Emmanuel Addo and Mr. Kow Ansah. In fact, oral accounts indicate that, Mr. Jake Otanka Obetsibi Lamptey is the originator of the idea of radio and TV commercials in Ghana since he had that experience in Britain before he was employed in GBC in the mid-1960s.

Being the only television station in Ghana in those days, GTV dominated television advertisement until the emergence of the digital revolution and computer technology in Ghana in the 1980s which subsequently led to the establishment of different regional, metropolitan and national TV stations such as TV3, Metro TV, TV Africa, Sky TV, Adom TV, etc. in many towns in Ghana. Due to the increased knowledge in computer technology, there were many multimedia advertising agencies that produced TV commercials for government and private organisations, such as political parties, businesses etc. Notable among them are advertisements for different products and services like Cow Bell, Fan Milk, MTN, Glo, Airtel, etc.

Another form of multimedia advertisement that has emerged in Ghana is internet advertising. Internet technology was first introduced in Ghana in 1998 by Network Computer Systems. They were followed by Africa Online and Ghana Internet Services (ghanaweb.com, 2021). Since then, the technology has developed to the extent that many local advertising agencies design webpage advertisements for governmental organisations, private businesses, political parties, institutions individuals etc. In the past decade, there have been influx of android phones in Ghana and this has promoted the use of different social media applications such as Facebook, WhatsApp, Twitter, Instagram, etc. Due to the interactive nature and scope of coverage of these applications, many multimedia companies in Ghana produce mobile applications and web commercials for clients and place them on the internet and social media applications. This fast-growing technology has increased internet and mobile marketing in Ghana.

### **Development of Graphic Design Education and Training in Ghana**

The level of sophistication in the local Graphic Design industry developed in the year 2000 and beyond could not have been achieved without an effective Visual Art education in Ghana. It is therefore imperative that the etymology of Graphic Design education in Ghana is traced so that we can identify the systematic developments that have occurred in the training and how it has impacted on the industry and economy over the years. Edusei (2004) reports that, art subjects were included in the colonial

educational system in 1909. The subject was called “Hand and Eye” on the time-table. Subsequently, in 1927, a Visual Art department was established in Achimota School by the then principal Rev. A. G. Fraser and appointed G. A. Stevens as the art master. The department passed through the hands of many art tutors such as Mr. C. Dey, Mr. A.P. Brown, Mrs. H.A. Barker, Mrs. Bardsley, Gabriel Pippet, H.C. Larbi, Mr. D.K. Asante etc. The scope of the subjects was limited to drawing and painting, wood carving, basket weaving and European art history.

The greatest turning point in art and crafts education in the Gold Coast occurred in 1936 when the then principal of Achimota College Rev. H. M. Grace appointed H.V. Meyerowitz, an accomplished sculptor and designer as art and crafts supervisor who received the support of Tom Barton, the director of education to elevate the art department to a school of art and craft, offering a three years’ course in specialist art and craft teaching. Meyerowitz, widened the scope of the specialist curriculum to embrace a lot of Visual Art and craft subjects which included lettering and designing. The school trained many specialists art and craft tutors who established Visual Art departments in most senior secondary schools and many of the tutors were awarded scholarships to further their studies abroad.

In October 1951, the Kumasi College of Science and Technology was established by a government ordinance which was officially launched on 22<sup>nd</sup> January, 1952 where the specialist school of art and craft at Achimota College was transferred together with all the 200 teacher training students to form the nucleus of the new Kumasi College of Science and Technology (knust.edu.gh, 2021). As the College of Science and Technology developed, the government decided to make it a purely science and technology school. In pursuit of this policy, the teacher training college was transferred to Winneba in January 1958 where the specialist courses in art and craft continued.

At the Kumasi College of Science and Technology, a new art department was established to train industrial artists. The department offered degree and diploma programmes which included General Graphic Design studies and book industry studies. After attaining complete autonomy in 22<sup>nd</sup> August, 1961, it was renamed Kwame Nkrumah University of Science and Technology (KNUST) (knust.edu.gh, 2021).

The College of art remained the only college that trained graphic designers and printers to feed the local industry. Later City and Guilds craft certificate course in printing was established at Tema Technical School to train artisans to complement the services of graduates from KNUST. After some years, the department developed into a school and the book industry programme was upgraded to B.A publishing studies. Responding to the rapid introduction of modern technologies and new dimensions in Graphic Design and Printing in Ghana, the art school restructured its Graphic Design and Publishing Studies programmes. The Graphic Design programme for instance, was renamed Communication Design and introduced specialisations in advertising and packaging, printing and illustration, and multimedia studies. The publishing department also introduced specialisations in press and publishing management and printing technology and illustration.

Before the emergence of Information Communication Technology (ICT) and the digital revolution in

Ghana, the scope of Graphic Design curricular in Ghana was based on vector graphics, however, the introduction of these technologies in the local industry made it possible for the Communication Design department at KNUST to introduce the multimedia studies in the curricular. At the moment, KNUST is offering MSc Publishing Studies, M. A., M. Phil and PhD programmes in Communication Design and Visual Communication respectively.

The art education department at Advanced Teachers' Training College (ATTC) Winneba, offered certificate and diploma programmes in art education until the 1987 educational reform which led to the establishment of the amalgamated University of Education, Winneba in September, 1992 under PNDC Law 322. As a result, the department introduced a two-year post-diploma and four years combined bachelor of education degree programmes in Graphic Design and one three-dimensional Visual Art areas. Responding to the high demand for professional Graphic Designers in industry, a Graphic Design lecturer in the department called Mr. Yaw Gyapong developed a four-year Bachelor's degree curriculum in general Graphic Design and defended it vigorously at faculty and academic boards on different occasions until it was approved and implemented in 2007. The Graphic Design unit was subsequently upgraded to a department (UEW Admission Brochure, 2021). The department subsequently introduced a diploma programme in Graphic Design. Recently, the department has expanded its B. A. Graphic Design programme by creating specialisations in Advertising, Graphic Design and multimedia and also introduced a bachelors programme in Animation. To break the monopoly of KNUST in graduate Communication Design education in Ghana, the department introduced M. Phil. in Visual Communication Studies in 201-2022 academic year with specialisations in advertising, Graphic Design and Multimedia.

Again, responding to the objective of the 1987 educational reform of increasing training of middle level manpower in Ghana, an astute art educator and industrial textile designer Dr. J. N. Mensah, developed a comprehensive Higher National Diploma HND curriculum for a number of Visual Art disciplines including Graphic Design as thesis for his Master of Art education degree programme at KNUST (which he called Commercial Art) and implemented it at Takoradi Polytechnic in 1995 (Takoradi Polytechnic Admission Brochure, 1996). The HND Commercial Art programme in Graphic Design ended the monopoly of KNUST in training higher level industrial Graphic Designers in Ghana. From 1995 to date, the department has trained thousands of graphic designers most of them are holding various positions in the advertising and printing industry, while some have become entrepreneurs and art educators in basic and second cycle schools across Ghana.

The findings also indicated that, in 2008, the Graphic Design Department of the School of Applied Arts, Takoradi Polytechnic introduced a two-year top-up Bachelor of Technology B-Tech programme in Graphic Design with specialisations in advertising and packaging, pre-press and printing technology, animation and illustration, and multimedia and photography for HND holders. Currently, After the upgrade of Takoradi Polytechnic to Technical University under the Technical University Act of 2016, the University now runs Four (4) Year B-Tech and Master of Technology (M-TECH) programme in Graphic

Design and Printing and Textiles Design in both the Department of Graphic Design Technology and the Department of Textile Design and Technology (Takoradi Technical University Diary, 2020).

Recently, Bolgatanga Polytechnic (now Bolgatanga Technical University) also introduced HND industrial art in Graphic Design, Tamale, Ho and Kumasi Technical Universities have also introduced HND in Industrial Art which include Graphic Design option. In addition, a number of private tertiary institutions in Ghana such as Bradford University College, Christ Apostolic University Collage, IPMC, NIIT, Ghanatta Art College etc. offer certificate, diploma and first-degree programmes in Graphic Design disciplines.

To pursue the broad objective of expanding Technical and Vocational Education and Training (TVET) programmes in the department of Vocational and Technical Education (VOTEC), University of Cape Coast (UCC) tasked Dr. Eric Agyarkoh and Dr. James Ekow Appiah to develop Bachelor of Education Curricular in Visual Arts for the University in 2012. The curricular went through various processes of approval and accreditation and in 2019, the programmes were implemented in the VOTEC department by the two doctors. The programmes are four-year Bachelor of Education in Communication Design and Bachelor of Fine Art Education with specialisations in Painting or Sculpture.

The findings also revealed that, pre-tertiary Graphic Design education and training in Ghana has gone through series of developments to its present status. In respect of basic education, elective Graphic Design was introduced as one of the options for the vocational skills syllabi of the Junior Secondary School curriculum in the 1987 educational reform. This Graphic Design syllabus was also incorporated into the Basic Design and Technology (BDT) curriculum in the 2004 education reform as Visual Communication (Teaching Syllabus for BDT, 2007). The ordinary and advanced Levels secondary education system that was run in Ghana until 1990 did not have specialisation in Graphic Design. However, the 1987 education reform introduced Graphic Design as elective subject in Senior High Schools (SHS). (White paper on the new educational reform, 2004 & Teaching Syllabus for Graphic design, 2008). In order to equip SHS Graphic Design students with modern skills to face the demands of industrial practice and tertiary Graphic Design education, the 2004 education reform also incorporated computer generated graphics design in the curriculum.

#### **4. Conclusions**

It is obvious from the above findings that factors such as political activism, entrepreneurial optimism and resilience, favourable government policies, adaptability to new technologies, artistic creativity and innovativeness in curriculum design and implementation, epistemology, pragmatism and curiosity that have characterised the culture of Graphic Design education and practice in Ghana for a century have contributed to the dramatic technological, logistical, conceptual and economic development that have taken place in the local Graphic Communication Design industry. In fact, the rapidity in which ICT and digital technologies are emerging in the local Graphic Design industry point to the fact that the industry will continue to develop unabated and that it is imperative for industrial Graphic Designers'

entrepreneurs, and Graphic Communication Design educators' and students to be proactive and be abreast with contemporary trends of developments in the industry locally and globally.

The researchers are convinced that the reconstructed history of Graphic Design practice and education in Ghana will close the gap in the local literature, broaden the scope of the literature and provide a comprehensive, sequential and coherent historical document that can be integrated into Ghana's Communication Design related curricular at all levels of education so as to preserve and promote knowledge on the local history for posterity. The researchers will therefore suggest that other researchers can research and document the biographies of iconic individuals who have contributed immensely to the development of Graphic Design practice and education in Ghana from inception to date.

## References

- Adams, Faux, & Rieber. (1988). *Printing Technology* (3rd ed., p. 169, p. 310). New York, Delmar publishers Inc.
- Advertising Association of Ghana. (2012). *Advertising in Ghana: Growth, development and focus*. Accra: AAG Head office.
- alliancemediamedia.com. (2021). *Outdoor advertising in Ghana*. Retrieved May, 20, 2021, from <http://www.alliancemediamedia.com/>
- alliancemediamedia.com. (2021). *Portfolio*. Retrieved May, 20, 2021, from <http://www.alliancemediamedia.com/>
- Amenuke, S. K., Dogbe, B. K., Asare, F. D. K., Ayiku R. K., & Baffoe A. (1999). *General knowledge in art for senior secondary schools* (pp. 116-124). Ministry of education.
- Breckhuizen R. J. (1992). *Graphic Communications* (4th ed., p. 127). New York. Glencoe, McGraw-Hill Company.
- Campbell, A. (2005). *The New Designer's Handbook*. UK: Little, Brown and Company.
- City & Guilds of London Institute. (1988). *Teaching syllabus for Painting and Decorating craft*. Accra: Ministry of Education, Technical examinations unit.
- Dennis, E. A., & Jenkins, J. K. (1991). *Comprehensive Graphic Art*. New York: Glencoe/McGraw-Hill.
- Edusei K. (2004). An over view of visual art education in Ghana. *Journal of Science and Technology*, 24(2), 116-120. <https://doi.org/10.4314/just.v24i2.32923>
- entrepreneur.com. (2021). *Outdoor advertising*. Retrieved May 16, 2021, from <http://www.entrepreneur.com/encyclopedia/term/82608.html>
- Eyiah, J. K. (2002) *Printing in Ghana: Then and Now*. Retrieved October 23, 2021, from <http://www.ghanaweb.com/GhanaHomePage/features/artikel.php?ID=26872>
- Fraenkel, R. J., & Wallen, E. N. (2009). *How to design and evaluate Research in Education* (7th Ed.). New York: McGraw-Hill Companies Inc.
- gerofix.net. (2021). *Outdoor advertising in Ghana*. Retrieved May 16, 2021, from <http://www.gerofix.net/>
- gerofix.net. (2021). *Portfolio*. Retrieved May 16, 2021, from <http://www.gerofix.net/>

- Getlein M. (2002). *Gilbert's Living with Art* (6th ed., p. 205). New York, McGraw-Hill Companies Inc.
- ghana.mom-rsf.org. (2021). *Free market policy in Ghana*. Retrieved December 5, 2021, from <https://ghana.mom-rsf.org/en/context/history/>
- ghanaweb.com. (2021). *History of internet in Ghana*. Retrieved January 5, 2021, from <http://www.ghanaweb.com/GhanaHomePage/it/history.php>
- ghanaweb.com. (2021). *History*. Retrieved October 18, 2021, from <http://www.ghanaweb.com/GhanaHomePage/it/history.php>
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, 29(1981), 75-91. <https://doi.org/10.1007/BF02766777>
- Kipphan, Helmut. (Ed.). (2001). *Handbook of Print Media: Technologies and Production Methods*. Germany: Springer-Verlag Berlin Heidelberg.
- knust.edu.gh. (2021). *KNUST, our history*. Retrieved October 17, 2021, from admissions information <http://www.knust.edu.gh/pages/sections.php?mid=14&sid=94&id=115>
- Merriam-webster.com. (2020). *Definition of Graphic*. Retrieved May 18, 2020, from <https://www.merriam-webster.com/dictionary/graphic>
- Owusu-Baah, E. (2008). *Modern advertising and sales promotion for Professionals and tertiary education*. Accra: Methodist book Depot Limited.
- pressreference.com. (2021). *Ghana Press, Media, TV, Radio, Newspapers forum*. Retrieved October 18, 2021, from <http://www.pressreference.com/Fa-Gu/Ghana.html>
- pressreference.com. (2021). *History of Ghana media*. Retrieved October 16, 2021, from <http://www.pressreference.com/Fa-Gu/Ghana.html>
- Rank J. (2020). *History of Printing in the Gold Coast*. Retrieved August 16, 2020, from <http://www.pressreference.com/Fa-Gu/Ghana.html>
- Sebbeh, B. J. (2004). *Notes on Design History* (Unpublished). Teaching notes, Takoradi Polytechnic.
- Silverman, D. (2001). *Interpreting qualitative: methods for analysing talk, text and interaction* (2nd ed.). London: Sage publications.
- Society of Graphic Designers of Canada. (2020). *What is Graphic/Communication Design*. Retrieved January 6, 2019, from <https://gdc.design/design-buyers/what-is-graphic-design>
- Takoradi Polytechnic. (1996). *Admission Brochure*. Takoradi Polytechnic.
- Takoradi Technical University. (2020). Takoradi: Takoradi Technical University.
- Teaching syllabus for Basic Design and Technology for Junior High Schools*. (2007). Accra Ministry of Education Science and Sports. p. 5.
- Teaching Syllabus for Graphic design*. (2008). Accra. Ministry Education, pp. 1-50.
- Tuckwell, K. J. (1992). *Canadian Advertising in action* (2nd ed.). Ontario: Prentice-Hall Canada Inc.
- UEW Admission Brochure. (2021). *Brief History of UEW*. Retrieved from: <http://uew.edu.gh/111/admission.pdf>
- White paper on the new educational reform*. (2004). Accra. Ministry Education.