

<u>ISSN:</u> <u>2278 – 0211 (Online)</u>

# The Use Of Visual Art Forms In Teaching And Learning In Schools For The Deaf In Ghana: Investigating The Practice

# Gideon Kwesi, Obosu

BA (Publishing Studies), Mphil Art Educ. (Kumasi)
Department of Educational Foundation, Faculty of Education
University of Cape Coast, Ghana, West Africa

# Joe, Adu-Agyem

BA (Art), Grad Dip (Art Educ.), MA, PhD (Kumasi) Senior Lecturer at Department of General Art Studies, Faculty of Art Kwame Nkrumah University of Science and Technology (KNUST),

KumasiGhana, West Africa

## Nana Afia, Opoku-Asare

BA (Art) (Kumasi), MA(Art Educ) (Kumasi), MPhil (Sussex), Grad Dip Mgt (IPMA-UK)

Department of General Art Studies, Faculty of Art Kwame Nkrumah University of Science and Technology, Kumasi Ghana, West Africa

#### Abstract:

Students who are deaf typically lack the language of the hearing, even in written form. This hearing handicap presents serious academic challenges that require visual teaching strategies. Nonetheless, it is not clear whether visual teaching is practised in the various Schools for the Deaf hence the need to investigate its practice in the Schools for the Deaf in Ghana. A multiple site case study approach was adopted to investigate teaching and learning in five Schools for the Deaf in Ghana. The purposive sampling technique and a three-tier research strategy involving observation, in-depth interview and focus group discussion were used to get the accessible population and to gather data for the study respectively. The findings from this qualitative study revealed that although the deaf is a visual learner, visual teaching in Schools for the Deaf is not adequately practised in a way that meets the visual needs of the deaf. Therefore the need to adopt and modify new trends to meet the needs of deaf students.

**Keywords**: Visual teaching, Art, Projected and Non-projected Visual Art Forms.

#### 1.Introduction

Although much literature exists on the benefits of illustrations and other visual formats to support teaching and learning, little is known about how such visual art forms can support the education of the deaf. Deaf people are by nature, visual learners (Easterbrooks & Stoner, 2006) and should be taught visually and aesthetically. The absence of auditory feedback which is necessary for speech acquisition during the early developmental stages is most handicapping in students who are deaf and therefore require visual teaching. Whereas hearing children regulate their own speech and recognize the speech of others largely through hearing, the deaf depend mainly on vision to perceive the speech of others. Due to this hearing impairment and visual aspect of the deaf, they are regarded as visual learners. This explains that, everything taught to them should be visual enough to compensate for their hearing lose. The use of visual art forms in teaching to the deaf therefore plays a pivotal position in the success of deaf education, so research is needed to ascertain whether or not teaching done in the Schools for the deaf include enough visual art forms.

Long before words were understood by any human, the art of gestures and movements had already been understood underscoring their importance in communication (Smith, 1995). Children gesticulate, make movements, leap, draw and paint long before they form proper speech communication skills. Art is a visual language with receptive and expressive components in which ideas are communicated without having to make a speech (Eubanks, 2011). This suggests that art can become a teaching tool in the education of people with verbal communication disabilities. Art can also move from the fringes of the curriculum toward the core of learning for all young children, especially those for whom spoken language acquisition is difficult.

Art is a method of expression and a form of language through which students can become more sensitive to their own ideas and feelings and communicate these with peers and adults. Because art is an important form of communication, it may have especially important implications for students who have language handicaps. Art is particularly relevant in the education of the deaf because it provides them with a means to focus on what the eyes can see rather than what they can hear. To the deaf, art can be a hobby, a learning aid as well as a mode of communication.

Even in peer relationships, art activities provide many opportunities for students to work together and to share their expertise. When handicapped students have special talents in art and are given peer recognition, their cognitive, social and emotional developments

are enhanced (Schulz and Turnbull, 1984). In much the same way art can provide unique ways for deaf students to acquire skills and knowledge that could otherwise be impossible to gain, giving them the confidence to be creative while engaging in art activities. The teaching of reading has traditionally also incorporated art such as pictures and illustrations that facilitate the understanding of the text. In a classroom scenario, students can describe their experiences for the teacher to write these down in words which the students then illustrate through art projects and thereby learn to recognize and comprehend the words in written form.

Another idea is that children's drawings offer a cognitive pathway into their understanding, allowing their teachers to check the students' understanding of new vocabulary and correct syntax (Eubanks, 2011). Eubanks believes that drawing and other visual means of thinking can foster the development of written language because it provides an opportunity to rehearse, develop, and organize ideas prior to writing. This suggests that students who are deaf could learn to rely on visual clues for information and understanding.

In comparing art as a visual language to a verbal language, Eubanks (2011) identifies that verbal language consists of receptive and expressive components. Whereas receptive language refers to the understanding of words used by others and the decoding of verbal symbols, expressive language refers to communicating ideas by speaking or writing, in effect, the creation of coded verbal symbols. In visual language, Eubanks explains that viewers read and interpret the visual symbols encoded in works of art and express visual language through the creation of visual symbol systems which enables them to make marks or objects that communicate ideas. This means that form in verbal language constitutes sounds, words, and the way the words are arranged. The equivalent of this in the visual language, Eubanks states, is the physical evidence of the artist's expression in terms of the elements of art and principles of design. The implication is that content in language can be considered equivalent to meaning in the visual art forms as meaning is often embedded in the symbols artists use and arrange with the conscious intent of creating meaning.

Visual language is more holistic than spoken language and more efficient as a disseminator of knowledge than most other means of communication (Eubanks, 2011). In much the same way, Arnheim (1969) as cited in Eubanks (2011) considers visual language superior because it comes closer to the original stimulus as verbal language is linear, sequential, and one dimensional, by comparison. It is perhaps these factors that

make Art educators describe art as the first language of children. We learn to read visual language, without formal instruction earlier and more spontaneously than verbal language. Consequently, children with modest verbal reading ability are able to read complex visual images. Citing Owens (1988), Eubanks agrees that children can understand words before they can say them. Similarly with visual language, young children learn to recognize and identify visual images by age one-and-a half or two years, though they generally do not begin to make meaningful marks before age 3 or 4 years.

All the similarities described as existing between art and language point toward the perspective that art is a language, a system of symbols used for communication. The relationship between art, the visual language, and verbal language development is a strong one. Young children's visual expressions can be an important part of their developing symbolic repertoire (Eubanks, 2011) and therefore in the teaching and learning process teachers and learners need to employ more visual language. Deaf students need visual expression to communicate and should be taught through visual language because their inability to perceive sounds and speech auditorily establishes the need for them to rely on what is seen and not what is heard. This implies that the deaf is a visual learner and therefore quality education for them should be based on teaching through the use of visual art forms.

#### 2. Teaching Through Visual Art Forms

Art in general have served as a universal language for humans since the beginning of time. Gestures, body movement, paintings, pictures, sculpture, ceramics and masks are all visual art forms that carry symbolic meanings that often do not have verbal equivalents; they are understood without words. The Committee on Labour and Public Welfare of USA which passed the Education for All Handicapped Children Act in 1975 states that;

The use of the arts as a teaching tool for the handicapped has long been recognized as a viable, effective way not only of teaching special skills, but also of reaching youngsters who had otherwise been unteachable. The committee envisions that programs under this bill could well include an arts component and indeed, urges that local educational agencies include the arts in programmes for the handicapped under this Act. Such a program could cover both appreciation of the arts by the handicapped youngsters and the

utilization of the arts as a teaching tool per se (Senate Report pp. 94-169 cited in Smith, 1995).

Invariably, the use of visual art forms helps strengthen memory in deaf students who have to rely so much on visual communication to be informed. Smith (1995) believes the art helps cognitive development and explains that all the arts offer opportunities for the child to talk about what he/she is doing or expects to do, and all the arts work on helping a child to visualize. To visualize helps a child to remember, which helps in academic development. Even straight academic content such as mathematics, grammar, syntax and spelling can be taught effectively to learning-disabled children through the arts (Smith, 1995).

Goodlad and Morrison (1980) as cited in Schulz and Turnbull (1984) claim that "education is incomplete when it fails to include art. Therefore, a school curriculum including little or no time for art is inadequate, whatever the level of the students' achievement in reading, mathematics or science" (p.234). This suggests that art activities allow students to develop and participate at individual rates and ability levels and to study and adapt to their environments. The teaching of basic skills and subjects through art has proven to be valuable in remedial and instruction.

Art enables handicapped students such as the deaf to initiate their own ideas and materials rather than to assume passive roles (Schulz and Turnbull, 1984). Students with learning problems have difficulty developing academic skills therefore they can compensate for their deficiencies by developing interests and talents in other artistic endeavour that they can perform successfully.

Art applies itself significantly in the education of the deaf. Art teachers can thus be seen as very important in the field of special education. By using artistic channels to teach, the academic skills and self-concepts of deaf students are developed. This is because art provides student-centered experiences that are adaptable to every aspect of the school curriculum and to all skills areas (Schulz and Turnbull, 1984).

Almost every child can be reached and taught innumerable skills through art which foster intellectual, physical, social and emotional growth that are essential to quality education. The idea is that the art provides activity learning which immature students greatly need to gain total involvement to ensure their understanding of the material being taught. Smith (1995) elaborates further that the;

Arts lend themselves to the imaginative use of concrete materials and experience to teach abstract ideas. Neural immaturity makes it very hard for disabled children to grasp

abstractions. They have to be introduced to abstractions through their bodies, through objects and pictures and then through symbols. The arts offer opportunities to strengthen visual, auditory, tactile and motor areas. Through the arts, children can order their worlds, make sense of what they know, relate past experience to the present and turn muscular activity into thought and ideas into action (p. 170).

Though Smith's statements refer generally to all learning disabled students, these assertions are also true for the deaf learner who needs the arts because he/she cannot hear to understand what is taught. Art offers pleasure and tangible results to children and that if a child has not acquired the basic skills essential for approaching academic tasks even if he/she is taught several times in the classroom, he/she could be taught successfully through the arts. By working with sizes, shapes, colour; using and recognizing a symbol in varying context, they learn better (Smith, 1995). This pre-supposes that the skills for academic readiness inherent in the arts can help deaf students to organize and remember sequence as well as gauge relationships through what they can see and do. A major point of reference is that, visual teaching is one of the teaching strategies of the deaf but it is not clear whether it is fully practised in the various Schools for the Deaf in Ghana or not. More specifically, the study attempts to achieve the following core research objective-to investigate the uses of visual art forms in teaching and learning in Schools for the Deaf. Essentially, this article responds to the call for a new thinking about deaf education with the practice of visual teaching in view. The findings of this study are expected to add to the growing body of literature on deaf education and to increase awareness on the need for more visual art collaboration in deaf education.

In this article, the term "visual teaching" has been defined to include the use of visual art forms such as pictures, illustrations, sculpture pieces and real objects to facilitate teaching and learning in the Schools for the Deaf.

#### 3.Methodology

The study employed the qualitative research with multiple-site case study approach to investigate the teaching and learning activities in five Schools for the Deaf located in four regions of Ghana. Data was collected through observation, in-depth interview and focus group discussion which was made possible because the lead researcher was literate in the Ghanaian Sign language and therefore understood the teaching and learning procedure in the various classrooms of the deaf.

## 3.1.Population

Five Schools for the Deaf are located in the Greater Accra, Western, Ashanti and Eastern Regions of Ghana were sampled for the study. The sample studied was a homogenous group of 50 legally deaf students, five headteachers and 45 teachers. Additional data were obtained through observation in 48 different classrooms and interview of two deaf education specialists; a lecturer at the Department of Special Education, University of Education Winneba and a former president of the Ghana National Association of the Deaf (GNAD). This made a sample size of 104 respondents.

#### 3.2.Procedure

The observation was carried out in 48 out of 64 classrooms, making 75%. The classrooms were confidently observed for 8 weeks. Series of observations were carried out with teachers and students of the selected schools. These exercises also took place during practical lessons in order to observe the use of visual art forms in the sampled Schools for the Deaf.

Unstructured interviews were conducted with five head teachers, 30 teachers and 50 students of the selected schools, two specialists in deaf education and two stakeholders of education. Several trips were made to the selected Schools of the Deaf and individuals to conduct the interviews. In each interview, the respondents were briefed on the essence of the research to get their interest and cooperation.

The focus group discussion was conducted in four of the five selected Schools for the Deaf. In all, 15 teachers participated in the various discussions. The discussions took place in the staff common rooms where the teachers were relaxing after classes.

The activities of the various classrooms were recorded using observation checklist. The recording device included laptop computer and a digital camera. Shots were also taken of some places and teaching aids available in the selected schools.

## 4.Findings

# 4.1. Teaching And Learning Processes In Classrooms Of Schools For The Deaf

Ghana lacks a policy on deaf education so what is practised in the Schools for the Deaf carbon-copies what is practised in regular schools. The teachers mostly employed the traditional "talk and chalk" method of teaching with discussions and expected their students to follow and participate. The discussion involved the use of Ghanaian sign

language which enabled the teachers to interact with their students through question and answer sessions in which a number of the students got involved. This method of teaching was particularly seen during Social Studies lessons. The teachers explained the content of the lesson to their deaf students virtually repeating most of the sentences in much the same way over and over again till the preferred understanding was attained.

Even though the activity and the project methods were used by some teachers in the Visual arts and Vocational skills departments, the situation was different at other departments such as the Social Studies and the English departments. In most English Language lessons observed, the teachers instructed deaf students to read verbatim from their English Language textbooks via Sign Language. Some of the deaf students were able to read intelligently via Sign Language but made little meaning out of the text. 58% of Junior High School 2 and 3 students as well as Senior High School students of the selected schools could read fluently word for word but their interpretations of the read text were misleading. Clarifications from the teachers revealed that Sign Language has its own rules and structure which are different from the rules and structure of English Language therefore, using it to teach or learn other language strictly without other interventions such as the use of visual art forms posed problems.

#### 4.2. The Use of Visual Art Forms in Schools for the Deaf

The study grouped visual art forms the teachers are likely to use in the teaching and learning processes of the deaf into two main categories; non-projected and projected visual art forms. The non- projected visual art forms included real objects, charts, models, photographs, blackboard sketches, practical demonstrations, drawings, paintings sculpture work and illustrations on substrate while the projected visual art forms included digital projections of visuals such as the use of computer and internet facilities. In the selected Schools for the Deaf, the teachers were familiar with non projected visual art forms while they focused mainly on the use of pictures and illustrations (as shown in Figure 1) to constitute visual teaching.





Figure 1: Examples of non-projected visual art forms used in the Schools for the Deaf Source: Field Photograph

At the preschool levels the teachers used non-projected visual art forms such as wall charts and flashcards as a support to teaching Sign Language to beginners; to enforce Sign Language and to teach rudimentary elements of the environment such as trees and houses to the deaf as Figure 2 depicts. The pupils in the kindergarten were able to touch and to create things with their own hands through visual learning. The on-hand experiences helped the deaf pupils to create memories that they could later refer. Using physical objects such as fruits, fish, trees, and tables, the deaf pupils were able to feel and come to terms with things of their immediate environment.



Figure 2: Kindergarten school teachers using pictures to support teaching Source: Field Photograph

Illustrations and pictures used to teach basic knowledge of living things to deaf pupils supported the use of visual art forms in teaching. For instance, in the School for the Deaf in the Greater Accra Region, the Kindergarten One teachers used colourful illustrations and pictures to teach deaf pupils subject on "the extended family system and family responsibilities". At that early stage of knowledge acquisition, everything taught in the lesson focused on the pictures and illustrations of wall charts and some diagrams that the teachers put up on the blackboards which helped the pupils to understand the lessons quickly.

However, the use of visual art forms in teaching to the deaf at the upper classes of the Primary, the Junior High and the Senior High School levels diminished as deaf students attained lessons from these upper classes. The teachers of these upper classes did not incorporate enough visual art forms in teaching. They stuck to the explanation and discussion method of teaching with little or no visual aid. Still the traditional "chalk and talk" method of teaching was observed in practice with little use of visual art forms flushing through in some lessons. The teachers generally "talked" at length during lesson periods and explained what are expected of the students via Sign Language with very little visual demonstration except for their facial and body gestures which the Sign Language requires for better communication. The teachers found it hard to appreciate the amount of knowledge that would be gained from the use of visual art forms in teaching to the deaf. They were of the notion that visual teaching is not a policy that requires strict enforcement. Although they acknowledged the importance of the use of visual art forms in teaching to the deaf, they took for granted the positive effect it would have on classroom teaching and learning.

The use of projected visual art forms such as computer and TV in the form of digital visual displays, power point presentations and the use of cartoons and animations attracted very little attention in the Schools for the Deaf both at the preschool and the High school levels. In most cases, the teachers had little knowledge of such projected visual tool as direct teaching materials. Most of such visual items existed in the sampled Schools for the Deaf but were not used as visual teaching tools. For instance, the teachers were of the view that the use of power point presentation may sway the attention of deaf students especially those at the very basic level such that its purpose in teaching may not be realized. This situation also gave reason to why most computer laboratories at the Schools for the Deaf had inadequate facilities such as computers and computer accessories.

## 4.3. Reasons For The Short Of Visual Teaching In Schools For The Deaf

All the teachers of the selected Schools for the Deaf were aware of the visual teaching needs of the deaf and the learning difficulties their students grapple with given the current teaching and learning challenges of deaf education in Ghana. The teachers believed that hearing impairment requires different communication modality skills and teaching strategies that meet the hearing handicap of deaf students. The teachers' description of visual teaching tallies with Gardner's (1993) claim that visual learners process information most effectively when the information is seen.

As Oppong (2003) also argues, the interest and participation of the deaf in the teaching and learning process are sustained if the teaching-learning materials are visual enough. However, 57% (17 out of the 30) of the participant teachers were of the notion that grown-up deaf students do not need a lot of visuals. They explained that as deaf students mature, the value of visual teaching diminishes implying that visual teaching is appropriate only for school children at the lower levels. This belief of teachers contradicts the claim of Easterbrooks and Stoner (2006) that visuals are important to all deaf students in all different age groups. The fact is that the teaching syllabi of the Schools for the Deaf in Ghana do not show sufficient guidance on what teachers are expected to do to incorporate visuals in teaching and so even though some teachers might want to use visuals they lack the guidance needed for a successful incorporation.

The teachers outlined a number of challenges encountered with the practice of visual teaching in the selected Schools for the Deaf. Visual art forms in the various Schools for the Deaf were inadequate. The teachers complained that the government of Ghana does not provide enough teaching-learning materials that meet their specific needs to the schools. The observation however, was that all the studied Schools for the Deaf had some teaching-learning materials such as posters and wall charts that the teachers did not make good use of. Such teaching-learning materials were left to gather dust in the offices of the headteachers.

The teachers argued that the use of visual art forms in teaching consumes a lot of time adding that the learning difficulties of the deaf already requires attention and demands a lot of explanation therefore, incorporating visual art forms would be time consuming and overly stressful for one teacher to handle. The teachers further expounded that as teachers of the deaf, they already lag behind in many subjects and are under pressure to catch up. Incorporating visual art forms would impede them from finishing their terms'

scheme of work, the syllabus on the whole and eventually negatively affect deaf students academically.

The study revealed that the teachers acknowledged the importance of basic visual art skills such as simple sketches and lettering in classrooms of the deaf but lacked the needed skills to practice them to facilitate their lessons. Similarly, although Information Communication Technology (ICT) provides a fine opportunity for them to manage visual teaching strategies in their lessons, the teachers reported that ICT facilities are lacking in the Schools for the Deaf.

# 5.Discussion

The notion is that special needs of the deaf require teaching that incorporates more visual art forms such as pictures, illustration and animations than it would be for their hearing counterparts. The use of pictures and diagrams are usually useful visual aids for all sizes of classes, provided they are well designed and appropriately used. Depictions such as pictures, paintings, drawings, charts, graphs, flow charts, and circles help to teach effectively to the deaf who think visually. Stokes (2001) supports the fact that deaf people are visual thinkers and so visual aids can be used to organize lessons for them; provide interest and motivation; increase retention of information and learning and save instructional and preparation time because they can be reused; aid Sign Language communication and stress important points.

The views of Easterbrooks and Stoner (2006) and Marschark and Mayer (1998) indicate that a curriculum stressing the mastery of grammar and speech instruction, with little time for visual and practical learning may not be in line with deaf education. Because deaf students are visual learners, they can only enrich their vocabulary visually. In this regard, an alternative means of communication should be practised in the classroom so that sensory stimulation and information can be provided, mostly visually. As the eye replaces the ear in classrooms of students who are deaf, everything instructional should be visual enough. Henley (1992) acknowledges that almost every child enjoys being read to, spoken to or sung to and being entertained while learning something new. In the case of the deaf, dramatic movements and gestures are all powerful generators of visual images that can be used as motivational strategies to challenge them. They can be useful if they are scaled to a mode of communication that accommodates the special needs of the child.

The deaf may be relying upon visual cues, signed language and body movement to learn new things from the classroom. Even though the use of visual art forms; the paintings and drawings as well as demonstration of gestures and movements in lesson presentations carry important messages, the teachers at both Junior and Senior High schools did not fully incorporate these in their lessons. The implication is that deaf students in Ghana would have to access education provided for them in their classrooms with much difficulty since they are taught lessons with little or no visual representations. In such dire situation, lessons taught to the deaf may not be fully understood.

As Dale (1969) explains, the teaching method which involves learning from information presented through verbal means or even verbal symbols only, is least effective. The most effective methods involve concise, purposeful learning experiences through means such as hands-on or field experience, manipulative, active participation, teacher demonstrations, relevant meaningful examples and the use of visual art forms. These practices offer the deaf students a touch of reality and practicality.

Visual representation as an important form of communication when effectively incorporated in classroom lessons can be used to teach science as it relates to concepts of texture, colour, pattern, space and form. It can also be used to teach counting, graphs, numbers, measurement, symbols, fractions, proportions and time which help meet the challenges deaf students face in their education. For example, deaf students who are unable to read from textbooks can learn concepts about foreign customs by analyzing pictures and other visual media and demonstrate their knowledge of these customs by constructing collage and murals of them. This instrumental strategy should not be used in a singular fashion but rather combined with other strategies into a multisensory approach that is particularly appealing to deaf students' sense of sight. The use of art as a teaching tool for deaf students is thus recognized as a viably effective tool because it can strengthen memory and help in cognitive development of deaf.

The basis is that since deaf students are visual learners and some of the subjects studied in Senior High/Technical School in Ghana are Vocational and Technical in nature, teachers should employ all visual and practical means of teaching possible to impart lessons to their deaf students.

#### 6.Conclusion

It is still not clear what constitute special teaching in Schools for the Deaf. Without being cynical, the Special Education Division of the Ghana Education Service has not

been proactive enough with respect to ensuring a policy on visual teaching in Schools for the Deaf. Although using visual elements in teaching and learning yields positive results for deaf students, the teachers simply repeat teaching techniques that resemble those of regular schools. The value of visual teaching in Schools for the Deaf has been underestimated because the teachers do not have adequate skills to teach visually.

The Schools for the Deaf in Ghana are falling behind in terms of offering visual literacy practices that meet the academic needs of the deaf. The only form of visual teaching practiced in the Schools for the Deaf remains as embellishment to written text or as a tool to teaching Sign Language. In the mean time, while Ghanaian Schools for the Deaf grope over the policy of what defines special teaching, some measure can be adopted to set things on course; the Activity method of teaching where deaf students receive practical and visual guidelines to enable them do things for themselves should be encouraged in the Schools for the Deaf.

At the Basic school level, the teachers should guide the students in most of the instructed activities through the use of visuals. The teachers should employ a lot of body gestures to demonstrate parts of their lessons. At the Senior High school level, lessons should be backed by a lot of demonstrations and coaching from the teachers. The practice of a method of teaching that gives deaf students hands-on experience as an effective learning strategy should be adopted.

Teachers of the deaf should at least be given in-service training on rudiments of drawing, sketching and lettering to enable them teach in a way that meets the visual needs of the deaf.

As a matter of expediency, visual teaching should be the focal point of every education formulated for the deaf.

#### 7. Reference

- 1. Dale, E. (1969). Audio-visual methods in teaching (3<sup>rd</sup> ed.). New York: Holt Rinehart & Winston.
- 2. Easterbrooks, S. R., & Stoner, M. (2006). Using a visual tool to increase adjectives in the written language of students who are deaf or hard of hearing. Communication Disorders Quarterly, 27(2), 95–109.
- 3. Eubanks, P. K. (2011). Art is a visual language. Language, 23(1), 31–35.
- 4. Gardner, H. (1993). Multiple intelligence: The theory in practice. New York: Basic Books.
- 5. Henley, D. R. (1992). Exceptional children: Exceptional Art. Teaching art to special needs. Massachusetts: Davis Publications, Inc.
- 6. Marschark, M., & Mayer, T. S. (1998). Interactions of language and memory in deaf children and adults. Scandinavian Journal of Psychology, 39(3), 145–8.
- 7. Oppong, A. M. (2003). Understanding and effectively educating the special needs students. Winneba: University of Education, Winneba.
- 8. Schulz, J. B., & Turnbull, A. P. (1984). Mainstreaming handicapped students-Guide for classroom teachers (2<sup>nd</sup> ed.). Bosten: Allyn and Bacon, Inc.
- 9. Smith, S. (1995). No easy answers-The learning disabled child at home and at school (Revised ed.). New York: Bantam Books.
- 10. Stokes, S. (2001). Visual literacy in teaching and learning: A literature perspective. Electronic Journal for the Integration of Technology in Education, 1(1), 1–10.