

# Teaching and Learning of Drawing for Book Design and Illustration: A Study of Higher Education in Publishing

Akosua Tachie-Menson<sup>1</sup>, Nana Afia Opoku-Asare<sup>2</sup> and Harry Barton Essel<sup>3</sup>

<sup>1</sup> Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.

*Received: 11 April 2015 Accepted: 5 May 2015 Published: 15 May 2015*

6

---

## 7 **Abstract**

8 The Publishing Studies department of Faculty of Art, Kwame Nkrumah University of Science  
9 and Technology (KNUST), Ghana, offers graduate training in three career paths: Book Design  
10 and Illustration (BDI), Publishing Administration and Printing Technology and Management.  
11 and Publishing Administration. A survey of 555 students in Years 1-4 revealed a skewed  
12 distribution of 47 in BDI, 285 in Printing, and 223 in Administration; manual drawing, which  
13 is required for specialisation in BDI, is a major threat to patronage in this Publishing Studies  
14 programme option. To understand this phenomenon required observation of drawing lessons  
15 and interviewing a convenience sample of 34 BDI students over two semesters. This  
16 qualitative study found that ability to draw significantly affects students' decision for BDI: 12  
17 reported good manual drawing skills for careers in illustration; 19 had limited drawing skills  
18 and preferred designing with computers; 3 had developed interest in drawing from Year 1 but  
19 preferred both aspects.

20

---

21 **Index terms**— teaching; learning; drawing; book illustration; publishing industry

## 22 **1 Introduction**

23 drawing as a universal language for selfexpression is an important tool for conveying otherwise concealed meanings  
24 of intentions to the general public. Learning to think creatively is important in drawing but learning the  
25 fundamentals of drawing is the most important skill to be acquired (Blavatt, 1993). "Drawing is a language  
26 from which other languages and visual communication have developed" ??Douet, 2000:6); drawings composed as  
27 illustrations in children's books for example, can summarize very long text. Drawings in books, magazines, and  
28 other printed materials educate, communicate, enlighten as well as provide information to readers, and to instill  
29 a sense of identity, belongingness and patriotism amongst them.

30 Essentially, drawing refers to the skill of making pictures or designs with a drawing tool such as pen or pencil.  
31 It is a formal artistic creation which serves as a means of visualizing ideas, a production of a successful planning as  
32 well as an interactive tool between draftsmen and their environment ??Encyclopedia Author ? ? ? : Department  
33 of Art Education, Kwame Nkrumah University of Science & Technology, Ghana e-mails : akosford12@gmail.com,  
34 afia\_asare@yahoo.co.uk, bartoness@gmail.com D Abstract-The Publishing Studies department of Faculty of Art,  
35 Kwame Nkrumah University of Science and Technology (KNUST), Ghana, offers graduate training in three  
36 career paths: Book Design and Illustration (BDI), Printing Technology and Management as well as Publishing  
37 Administration. A survey of 555 students in Years 1-4 revealed a skewed distribution of 47 in BDI, 285 in  
38 Printing, and 223 in Administration; manual drawing, which is required for specialisation in BDI, is a major  
39 threat to patronage in this Publishing Studies programme option. To understand this phenomenon required  
40 observation of drawing lessons and interviewing a convenience sample of 34 BDI students over two semesters.  
41 This qualitative study found that ability to draw significantly affects students' decision for BDI: 12 reported  
42 good manual drawing skills for careers in illustration; 19 had limited drawing skills and preferred designing with  
43 computers; 3 had developed interest in drawing from Year 1 but preferred both aspects. Adopting a sequential

## 4 D) BEGINNING TO DRAWING

---

44 methodology for teaching drawing could equip more students with high quality drawing skills to boost patronage  
45 and sustain BDI.

46 Akosua Tachie-Menson ? , Nana Afia Opoku-Asare ? & Harry Barton Essel ? and a master's finished works  
47 ??Wilson et al., 1999), hence a tool for education. Drawing is also meant to achieve an imitation of existing  
48 references in nature, to track down the illusion of visual experience of the material world, and communication  
49 of multifaceted intellectual and spiritual significance (Miller, 2008). Drawing is not only the foundation for  
50 all painting but the sketches seen in artists' sketchpads are personal shorthand notes or recordings of their  
51 preoccupations with the world about them (Encyclopedia and Irish World Art, 2008).

### 52 2 b) Drawing Techniques

53 Drawing techniques include an awareness of the proportions of objects in relation to each other, and the shape  
54 of the 'negative space'. Full use should be made of the area of support being worked on. Liveliness, depth, and  
55 interest can be created with the use of a range of contour lines, both in width and density; as different grades of  
56 pencil give a variety of lines. Unless making a contour drawing, the use of shading techniques such as hatching,  
57 will add form and texture. To give instant depth to the drawing, the darkest tones visible should be blocked in  
58 first. The tones should then be built up, and finally the extreme highlights added to bring the drawing to life (The  
59 Free Dictionary, 2007). Kimon (2001) describes drawing techniques in terms of blind contour, gesture, grisaille,  
60 mass, and scribble drawing. Other techniques drawing students can learn to use include outline drawing, outline  
61 to suggest light and shade, value drawing, and negative drawing. The use of outline drawing to suggest light and  
62 shade is regarded as a technique Vincent van Gogh used to suggest lines as the basis for drawing. In this sense,  
63 Mitter and Howze (2007) have cited Van Gogh for adopting contrasting lines to balance light and dark values  
64 to produce unified and appealing drawings that showed a wide variety of textures, defined spaces and identified  
65 shapes. Drawing Coach (2010) however, encourages artists to use what works best for them, with none thinking  
66 that there is something wrong with a chosen method. The choice of one technique over another depends on what  
67 is being drawn and how the artist wants the rendition.

### 68 3 c) Observation in Drawing

69 Observation is essential in drawing as it trains the draftsman's eyes to look critically at details in order to produce  
70 something that is honest for the viewer ??Encarta World English Dictionary, 2002). Observation involves the  
71 principle of painstakingly paying attention and critically scrutinizing an object, event or phenomenon in order to  
72 record what is happening correctly. This enables the artist to capture the size, shape, colour, lines and texture of  
73 the objects in total precision in order to reproduce them accurately in realistic and abstract drawings (Murphy,  
74 2007). When drawing, the function of a draftsman's eyes is more critical than what the hand does on paper with  
75 the drawing tool ??Drawing Coach, 2008). Observation in drawing involves the use of all the senses: hearing  
76 records sounds and rhythms or arrangement of pattern on objects; smell records strong or mild scent, good or  
77 bad odour of objects; tasting enables recording of bitter or sweet sensation if the object is edible or perceptions  
78 of bitterness or sweetness.

79 While the hand touches the object to feel texture as smoothness or roughness, hotness or coldness, hardness  
80 or softness, the sense of kinesthesia perceives and registers heaviness or lightness of objects. Studying objects  
81 in totality helps to understand objects before and during drawing. For this reason, any course in drawing must  
82 train students' eyes to observe in much detail to enable them produce drawings that are honest representations  
83 of what they see. They should also be taught how to observe intensely and what should be observed.

### 84 4 d) Beginning to Drawing

85 With regards to rendition of drawing, Mitter and Howze (2007) and Ruskin (2009) recommend that drawing  
86 should begin by first constructing outlines of the objects or subjects to be drawn but Artists, International  
87 Dictionary of Art and Artists (1990) and South (2009) say artists must start drawing by first rendering the values  
88 or tones of objects and subjects. Beginning drawing by first creating "lines" or "outlines" as the foundation of  
89 drawing reflects the practice of late 18 th and early 19 th Century artists such as Toulouse-Lautrec, Edgar Degas  
90 and Paul Cezanne who used lines to draw before George Seurat's technique of pointillism took away line drawing  
91 (Mitter & Howze, 2007). To Ruskin (2009), beginners must begin by drawing even lines slowly and in various  
92 directions until the whole of the object or subject is achieved. Drawing Made Easy (2006) also recommends that  
93 the teacher places the object to be drawn at a convenient spot near the blackboard and points out the outline of  
94 the object for the students to begin to draw.

95 Drawing can also be done by first shading the different tones of objects and subjects as the Venetian Rococo  
96 style artists Jean Antoine Watteau, Paolo Veronese, Giovanni Battista Tiepolo and Francesco Guardi practised  
97 (Artists, International Dictionary of Art and Artists, 1990). South (2009) however, calls for drawing to start  
98 by executing areas of light, dark, and inbetween tones rather than registering the outline of the edges of what  
99 is to be drawn. The explanation is that lines or outlines as beginning of drawings only define visible edges and  
100 fail to tell anything about light and dark. This is based on anthropological reports on cave art which posit that  
101 prehistoric man drew hard and linear lines before filling them with colour, suggesting that there is no hard and  
102 fast rule on how to begin drawing.

---

## 103 5 e) Teaching and Learning of Drawing

104 Learning is about exploring, conceptualizing, experimenting and interacting. Effective learning therefore comes  
105 by exposing the learner to the learning situation (Kochhar, 2004). "Because acquiring drawing skills is appropriate  
106 for learning drawing, the teaching of drawing must necessarily follow a logical sequence to enable all learners learn  
107 the designed knowledge and skills for drawing effectively" ??Kochhar, 2004:200). The premise is that drawing  
108 focuses on effective coordination of mind and muscle to culminate in the production of swift and meaningful  
109 patterns of movement, which has to be learned. Essentially, learning to draw depends on a gradual laid down  
110 process of teaching from the basics so that learners can slowly and consciously build on them to acquire the  
111 necessary knowledge and skills to enable them draw accurately (Lee, 2000). The premise is that successful  
112 learning through a sequential progression of activities will ultimately lead to students' mastery of knowledge and  
113 skills in drawing.

## 114 6 II. Data Collection

115 The study sought to describe how the teaching of drawing in the Publishing Studies programme in KNUST  
116 influences acquisition of requisite skills for career development in book design and illustration and the job market;  
117 and the relevant factors that influence first year undergraduate students' decision to specialize in Book Design and  
118 Illustration (BDI) and not Printing Technology and Management or Publishing Administration. The rationale  
119 was to understand why only 47 students (Year 2=11, Year 3=26, Year 4=10) were specializing in BDI which is  
120 perceived as art oriented as compared to 285 in Printing and 223 in Administration. This led to adoption of the  
121 qualitative research approach with direct observation to understand how the drawing curriculum is delivered on  
122 the programme from Year 1 -4 for two semesters and in-depth interview of a convenience sample of 34 (representing  
123 73%) of the 47 BDI students (13 were absent on first day of interview) to ascertain the extent to which pre-entry  
124 drawing experience and / or the teaching of drawing in Year 1 influenced their decision for career development  
125 in book design and illustration.

## 126 7 III. Discussion of Findings

127 A study of the Year 1 curriculum for the Publishing Studies programme shows drawing as a core course, ostensibly  
128 to bridge the knowledge and skills gap between students who enter the programme with and without prior  
129 learning of drawing and also ensure equitable distribution of students on its three specialised career paths in  
130 the publishing industry: Printing Technology and Management (PTM), Publishing Administration (PA) Book  
131 Design and Illustration (BDI).

132 Courses BI 151 and BI 152 Drawing are studied over two semesters. Course BI 151 Drawing is taught in the  
133 first semester whereas BI 152 Drawing is taught as a follow up course in the second semester. These twocredit  
134 hour courses were designed to provide adequate knowledge and skills in Book Design and Illustration for career  
135 development. Only students who specialize in BDI from Year 2 continue with studies in drawing up to Year 4.

136 As James (2006) posits, prior knowledge is a significant factor that influences student academic achievement  
137 and a powerful determinant of learners' capacity to learn new material. As regards the department's policy of no  
138 restrictions in entry qualifications, the study revealed that eight (representing 23%) of the 34 respondents who  
139 had no previous learning of drawing but were specializing in BDI as a result of interest and passion the teaching  
140 of drawing in Year 1 had instilled in them; sixteen (or 47%) had learned to draw on the Senior High School (SHS)  
141 Visual Arts programme; whereas eight had only learned to draw on the programme. Others had acquired the  
142 skill through self-tuition which they found adequate for the Year 1 course.

143 The interviews revealed that nineteen (or 56%) of the 34 BDI students had prior knowledge in drawing up to  
144 High School while fifteen (or 44%) of them had no formal training in drawing. This justifies the institutionalization  
145 of BI 151/152 Drawing in Year One to provide equal opportunity for all the students to access Publishing Studies  
146 programme. The different levels of drawing skills reportedly acquired by the respondents attest to the knowledge  
147 and skills deficiency the students had brought to the course. Thus, the teaching of drawing should focus on  
148 development of fundamental knowledge and skills in drawing which includes familiarity with the tools, materials  
149 and techniques for drawing. Adopting a step-by-step methodology that builds on the level of drawing required  
150 to satisfy the Basic Design and Technology (BDT) curriculum for J unior High Schools will make it easy for the  
151 'less able to draw' students to understand drawing and learn the technicalities in the Year 1 drawing course.

152 There is however, the challenge of differentiating learning activities and assignments to encourage the 'more  
153 able to draw' students to extend their learning and not waste time while the lecturers attend to their 'artistically  
154 less able' peers. Bridging the gap between the 'less able' and the 'adequately able' may not be as tough as  
155 bringing the 'drawing disabled' students up to attain the standard of drawing required to access BDI if they are  
156 interested in it. The question that needs asking is: 'what scope of content and studio assignments can adequately  
157 address this knowledge and skills gap to enable quality learning and professional capacity building in higher  
158 education?' This is an area of further research interest. In assessing the extent to which the students' pre-entry  
159 education had prepared them for higher education in publishing studies which has no corresponding programme  
160 in Ghana's senior high schools, it was realized that nineteen (56%) of the 34 students interviewed had studied  
161 art at both Senior High School (JHS) and Senior high School (SHS) and were taught to draw. Of this number,  
162 nine (or 27%) reported having been taught from the basics in a logical and sequential order that enabled them

163 to acquire a high standard of manual drawing skill which had adequately prepared them for higher education in  
164 programmes that demand drawing; opting for specialization in BDI was therefore appropriate. On the contrary,  
165 the other ten (or 29%) reported studying art in JHS and SHS without emphasizing on acquisition of drawing at  
166 either level and had thus not been adequately prepared for specialized studies in BDI which demands high level  
167 drawing skills.

168 Although seven (or 21%) of the 34 students reported they had learned to draw through self-tutelage which  
169 enabled them to pass their exams and gain entry into higher education, evidence from the interview revealed  
170 they had not acquired enough knowledge from the sources they used; they also had no idea what the different  
171 techniques of drawing were and therefore rated themselves ill-prepared for studies that demand drawing, including  
172 BDI. Interestingly, eight (or 24%) of the 34 students had never learned to draw; their motivation for specializing  
173 in BDI stemmed essentially from the interest and passion for drawing they had developed from the Year 1 drawing  
174 course. This suggests the need to encourage effective teaching of drawing within the pre-university Visual Arts  
175 programme to generate sufficient interest in drawing and thereby encourage more students with the relevant skills  
176 to opt for tertiary education in publishing studies and specialize in book design and illustration to sustain the  
177 book sector of the publishing industry. Although skewing admission to favour applicants with good passes in  
178 Visual Arts could improve intake into BDI with more 'drawing able' students and promote career development in  
179 book design and illustration. this could also deny the 'less able but willing to learn' applicants the opportunity  
180 to develop their creative potentials through BDI.

### 181 8 a) Specializations in BDI

182 The study found that the Book Design and Illustration (BDI) consists of Book Design which involves intensive  
183 application of computer software such as Photoshop, Corel Painter, Adobe Illustrator and Corel Draw for book  
184 designing; and 2) Book Illustration which involves manual drawing of objects using assorted drawing tools  
185 and materials and requires exercises in critical observation, hand and eye coordination, drawing and shading  
186 techniques, for example, to execute a variety of drawings required for illustrating text in books and other printed  
187 materials. Of the two components, nineteen (or 56%) of the 34 students were specializing in Book Design mainly  
188 because they had inadequate manual drawing skills unlike twelve (or 35%) who were majoring in Book Illustration  
189 by reason of their ability to draw well; the remaining three (9%) were specializing in Design but wished they had  
190 opportunity to study both aspects of BDI.

191 Having 56% of the 34 BDI students majoring in computer-aided book design as compared to 35% in manual  
192 drawing for book illustration implies that the teaching and learning of art in the Basic Design and Technology  
193 and Visual Arts programmes in JHS and SHS respectively are not providing enough capacity for higher education  
194 in publishing studies. The disparity between career development in book design and book illustration makes it  
195 imperative for the lecturers responsible for delivering courses BI 151 an BI 152 to adopt a back-to-the-basics,  
196 step-by-step process of teaching drawing in Year One to generate interest and encourage more Year 1 students  
197 on the Publishing Studies programme to opt for specialization in BDI to boost the publishing industry.

198 To Hailikari et al. (2008), it is beneficial for students to develop an integral framework from the start of  
199 their studies as good quality learning forms an important basis for future learning. Besides, it is not possible to  
200 assimilate new knowledge without having some structure developed from previous knowledge as effective learning  
201 proceeds primarily from prior knowledge and only secondarily from presented materials. Furthermore, Mednick  
202 (2006) postulates that any effort to teach from the negative must necessarily provide a path into the subject for  
203 the learner with respect to that learner's previous knowledge. Undoubtedly, students who lack prior learning in  
204 drawing will find it difficult following lessons and learn enough to explain text through appropriate illustrations  
205 that communicate effectively to facilitate understanding.

206 To facilitate effective acquisition of good drawing skills, Kochhar (2004) recommends teaching through  
207 graduated tasks of generally low level difficulty to complex content that is more difficult to learn. This strategy  
208 will encourage more Year 1 students to acquire the relevant skills that can help them to progress through the  
209 Book Illustration option of BDI to enable them manually execute appropriate and effective illustrations for books  
210 and other published literary materials.

211 When asked to rate the standard of teaching they experienced from Year 1, nineteen (or 56%) of the 34 BDI  
212 students interviewed said the experience was just adequate for them to satisfy course requirements while three  
213 (or 9%) reported high quality teaching for the purpose; six (representing 18%) said teaching had been good  
214 enough to enable them improve upon their drawing skills. Interestingly, the six remaining students (or 17%) of  
215 the 34 students rated the standard of teaching average with the view that the drawing skills they brought to the  
216 programme had only marginally improved. The implication is that the teaching of drawing from Year 1 of the  
217 publishing studies programme should start from simple activities that can be gradually scaled up to difficult tasks  
218 to enable the students understand drawing and also improve upon their knowledge and skills towards attaining  
219 excellent draftsmanship in book development.

220 With regards to why the BDI students fail to attain good drawing skills, half of the students interviewed  
221 said they do not understand what is taught them in drawing; 24% saw drawing as a 'difficult to learn' subject  
222 and although they strive to do well, they get discouraged by unpleasant comments their drawing lecturers and  
223 colleague students make about their drawing abilities. It was also realized that intense competition among the  
224 'more able' and 'less able' to draw students during classes make it difficult for many of the 'less able' students to

225 concentrate on the teaching procedures or openly exhibit their drawings; this prevents them from grasping the  
226 essentials of drawing that facilitates effective learning in class.

227 Considering that not all the students had previously learned to draw and had the foundation for Year 1 drawing  
228 to build on and address inequalities in knowledge and skills in drawing highlights the need for teaching to proceed  
229 in a sequential manner so that all the students can become proficient in drawing to ensure equity distribution of  
230 students on the three options of the programme.

231 This reflects Franzoni and Assar's (2009) call for teachers to adopt small orderly steps that are logically  
232 associated to the problem being solved and a step-by-step student-centered approach that is guided by  
233 understanding of the theory of multiple intelligences (Giles et al., 2003 as cited in Agbenatoe, 2011) and ensure  
234 that instruction is not inappropriate to the learning styles of students who are not learning (Hampton, 2009).

235 When the students were asked whether their level of knowledge in drawing would gain them employment as  
236 professional book illustrators, twentytwo (or 64%) of the 34 students said no, with the reason that they had not  
237 attained enough drawing proficiency for that purpose. They had not even developed sufficient interest in drawing  
238 to desire employment in illustration. The students insisted that those who want to attain advanced skills in  
239 drawing would need extra tuition to upgrade their drawing skills after graduation. However, the students who  
240 affirmed they had gained all the knowledge and skills they need in drawing regarded themselves as professional  
241 illustrators even before graduation.

242 The fact that 22 of the 34 BDI students interviewed did not report efficacy as professional illustrators suggests  
243 inadequate preparation for employment after graduation. The implication is that employers who accept graduates  
244 of this aptitude would have to employ or contract other illustrators to provide their manual drawing needs. As  
245 Weber (2000) indicates, students sometimes have difficulty understanding what is not related to their personal  
246 experiences and cultures because they lack the appropriate prior knowledge of the topic, or they do not know  
247 how to tap into relevant knowledge they do have. Research shows that students have varying learning styles, and  
248 that no single teaching style accomplishes all students' needs (Downes, 2010) and that many learning problems  
249 occur because there is a mismatch of learning styles between those offering instruction and those receiving it  
250 (Gardner, 2005). Adopting a variety of teaching strategies and a step by step methodology would ensure that all  
251 the students acquire adequate drawing skills to fulfill course requirements.

252 IV.

## 253 **9 Quality of Students' Drawing**

254 The following sections describe data collected through direct observation of teaching and learning sessions across  
255 the four year levels and the difficulties that the students encountered. Figures ??-2 a) Key difficulties identified 1)  
256 Incorrect holding of the drawing tool (pencil in this case), friction between the students' wrists and the drawing  
257 surfaces , and lack of control over the drawing tool inhibited free movement and resulting in creating crooked  
258 lines in Figure ??.

259 2) The mass shading technique in Figure ?? was executed from memory and not from the critical observation.

260 Drawing in Year 2 2) The strokes of the pencil reveal inexperience and lack of confidence of the students.  
261 The drawings show stiffness of the hands that held the pencil; they had not learned to relax the wrist muscles  
262 to achieve accurate drawings. 3) Of the many drawing and shading techniques, only outline drawing and mass  
263 shading techniques were used up to this level. 4) The drawings suggest lack of skill for critical simultaneous  
264 observation and drawing, hence, they had difficulty coordinating their hands and eyes.

265 5) As a result of the difficulties the students encountered, they resorted to tracing from printed materials as  
266 seen in Figure ?? and Plate 1.

267 Plate 1 : Printed photograph Overall, observation of the students' drawing revealed little improvement between  
268 Years 2 to 4. All the works were rendered realistically, which made it easier to compare the four sets of drawings.  
269 Fundamental drawing problems identified in the students' drawings suggest insufficient skills development by the  
270 students to attain the right foundation needed for good drawing in Year 4. They need copious exercises in still  
271 life, anatomical and landscape drawing to hone their skills from Year 2 for the advanced level drawing required  
272 for book illustration. This is not to say that all the students experienced difficulties; ..... those who had prior  
273 learning of drawing tackled their drawing tasks with ease at the various levels and seemed to know what to do at  
274 each stage. Nonetheless, the drawing lecturers must look out for students who have peculiar difficulties and deal  
275 with them on individual basis or adopt peer -tutoring techniques where the ' well able' drawing students can be  
276 assigned to help the 'less able' students to resolve those problems.

277 Pencil and pen were the commonly used tools by the students for drawing on white cartridge paper which  
278 limited acquisition of knowledge about the variety of drawing tools, materials and supports that are available  
279 for the teaching and learning of drawing. They were not given opportunity to test other drawing tools to enable  
280 them determine the distinct marks and characteristics (such as quality, range of marks and tones) of the different  
281 tools and how they affect the quality of drawings they produce. The students seemed Another obstacle to  
282 effective drawing was the students' inability to hold the drawing tool correctly to execute the class exercises.  
283 Learning the correct handling of different drawing tools could help the students to understand the advantages  
284 and disadvantages associated with each hold and the specific drawing tasks the various positions enable the tasks  
285 to be executed. Mastering how the pencil should be held would have enabled the students to produce free flowing  
286 lines instead of the multiple crooked lines that result when the hand rests on the drawing surface. It could have

287 also helped them to shade accurately. The students were also not taken through any preliminary hand and wrist  
288 exercises to relax their muscles before attempting to draw. This led to the drawing of multiple shaky lines. The  
289 strokes of pencil in their drawings show inexperience and lack of confidence.

290 Moreover, the students were not trained to critically observe the natural forms of objects they had to draw  
291 as a pre-requisite to understanding how to render the characteristics of the objects accurately on paper. They  
292 also lacked the skill of simultaneous looking and drawing of the objects in order to register continuous freehand  
293 drawing of lines while looking off the drawing support. To avoid this many of the students resorted to tracing out  
294 images from photographs and other printed materials and adoption of drawing via outlines and mass shading.

295 V.

## 296 10 Conclusion

297 The study shows that dissimilar educational backgrounds of the students admitted into the Publishing Studies  
298 programme in KNUST vis-à-vis inclusion of drawing as a core course in the Year 1 curriculum poses a major  
299 challenge to the teaching and learning of drawing, and the sustainability of the Book Design and Illustration  
300 component of the programme in particular. The key challenge is that drawing is studied by Visual Arts students  
301 only so expecting students with Science, Business and General Arts backgrounds to learn to draw and attain  
302 the standard required for rendering text as illustrations from Year 2 is inconsistent with educational practice in  
303 Ghana. Prior knowledge is a powerful determinant of a student's capacity to learn new material and a condition  
304 for successful learning ??Kocchar, 2004;Mzokwana, 2008).

305 Without the relevant foundation knowledge and skills to build on, some Year 1 students might experience  
306 psychological problems and intrapersonal conflict (Larson & Mildred, 2002) as they strive to fulfill course  
307 requirements. This might stifle their motivation for learning and thereby shun the BDI option of the programme.  
308 However, effective step-by-step teaching that starts from the level of Junior High School drawing could sway some  
309 students to opt for BDI and excel. As indicated earlier, ability to draw is a crucial factor that Year 1 students  
310 consider in their choice of programme options, particularly with respect to BDI which the students perceived  
311 as suitable only for Visual Arts students. The premise is that 23 or 67% of the 34 students surveyed brought  
312 previous learning experiences in drawing to the programme and were also specializing in BDI.

313 Unfortunately, inadequate drawing skill is driving potential illustrators in BDI into design which hinges on  
314 computer software applications for illustration simply because they have limited technical drawing skills for  
315 manual illustration. A more systematic instructional strategy that starts with the fundamentals of drawing and  
316 proceeds through an intermediate stage to an advanced level in Year 4 could address the disparities and provide  
317 all Year 1 students with a firm grounding in drawing. This would eliminate the frustration that drives potential  
318 BDI students into Printing Technology and Publishing Administration. The few students who develop interest  
319 from Year 1 drawing could also use the drawing sessions to develop their creative potentials and ultimately widen  
320 their career choices.

321 As the study revealed, only 47 or 8.5% of the 555 undergraduate students studied in Publishing Studies were  
322 specializing in Book Design and Illustration which is perceived as the only art-oriented career option as compared  
323 to 508 or 91.5% in Printing Technology and Publishing Administration. To have only 12 out of 34 BDI students  
324 majoring in Book Illustration because they had a high standard drawing skills to major in hand drawn illustration  
325 while inadequate drawing skills had confined 22 students to major in computer -aided Book Design suggests the  
326 possibility of Book Design and Illustration phasing out for lack of patronage. This also suggests the need to skew  
327 entry into the programme to admit more Visual Arts students to support BDI and scaling down the content of  
328 courses BI 151/152 Drawing to the level of drawing in Senior High School Form 1 to channel more Publishing  
329 students into BDI from Year 2. The large population of Year 2 -4 students in Printing Technology and Publishing  
330 Administration can thus be attributed to lack or inadequate drawing skills required for hand drawn illustrations.

331 For two lecturers to teach 47 mixed-ability students to attain the high standard of drawing skills required  
332 for illustrating text manually or by computer could be overwhelming. The drawing lecturers cannot achieve  
333 everything single handedly and adopt differentiated instruction strategies to meet individual learners' needs,  
334 learning styles or interests. This challenge could be addressed with the introduction of Learning Support  
335 Assistants (Stanfield, 2009) who could use their creativity to help with the monitoring, supervision and control  
336 of the different categories of students for effective teaching and learning of drawing. The LSAs could also help to  
337 instill a can-do attitude in the students and provide tutorials to motivate them both in class and independently  
338 to develop good drawing skills through continuous supervised practical exercises and assignments on a sustained  
339 basis.

340 Peer teaching (Boud, Cohen & Sampson, 2001) could also be adopted to engage the 'more drawing able'  
341 students to share their ideas, knowledge and experiences on drawing to support and encourage their peers in  
342 small groups to do well. This process of linking high achieving students with low achieving students in the  
343 classroom will enable the students help and mentor their peers under the supervision of the lecturers. The  
344 LSAs or Teaching Assistants (TAs) as they are addressed in KNUST, could consistently monitor and review the  
345 students' progress in drawing in conjunction with the drawing lecturers to ensure successful learning for all the  
346 students. The TAs could consistently monitor and review the students' progress in conjunction with the class  
347 teacher. With a little support and assistance, weak students in the drawing class would be able to succeed. This  
348 will free the lecturers to plan and implement differentiated teaching and help the 'less able to draw' students

349 without neglecting the 'well able' students. Inculcating the right attitudes to drawing would enhance the teaching  
350 and learning of Book Design and Illustration and the students' marketability and suitability for the publishing  
industry while also sustaining the specialized career option of this unique programme in Ghanaian education.



Figure 1:

351 1  
352

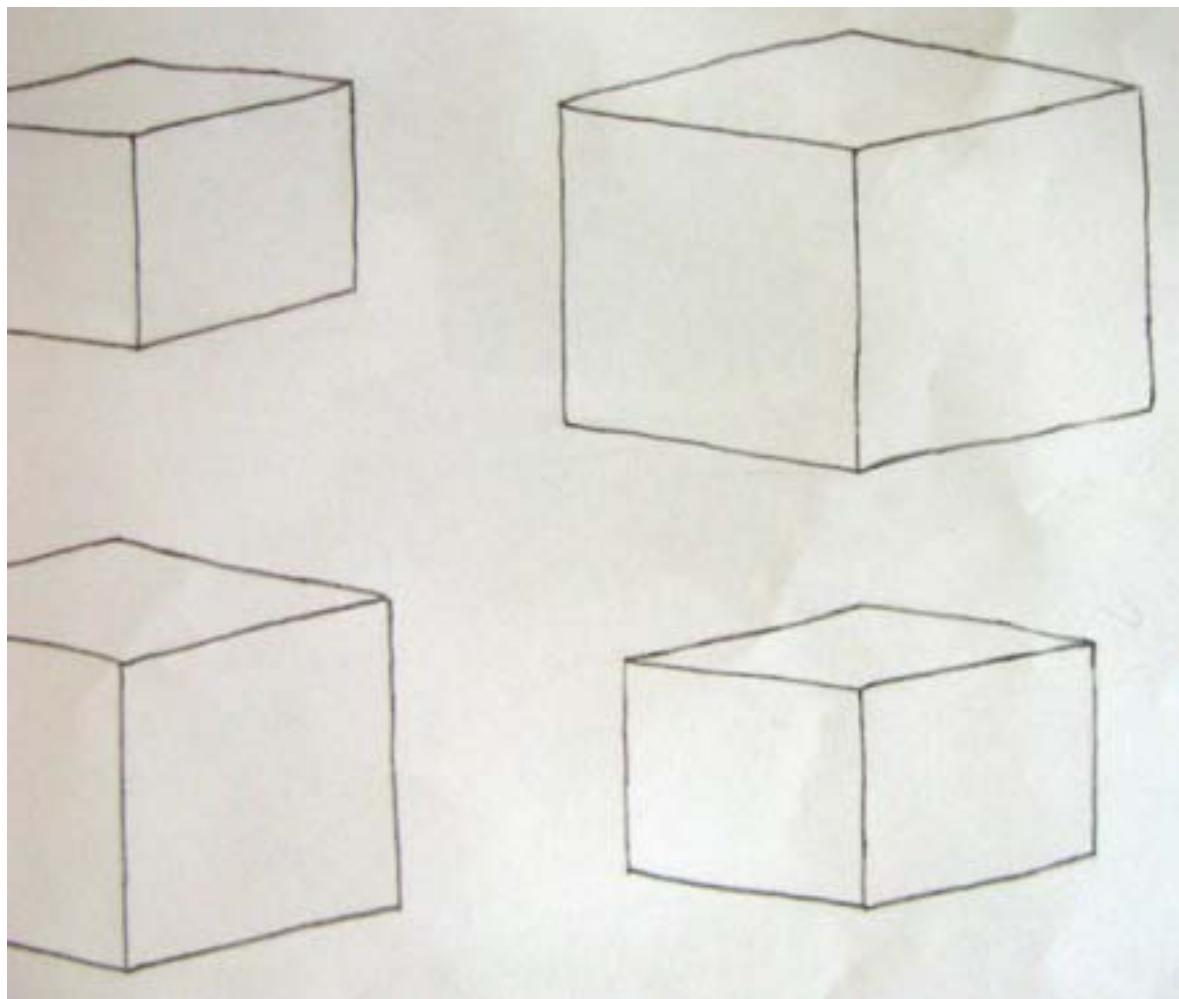


Figure 2:



12

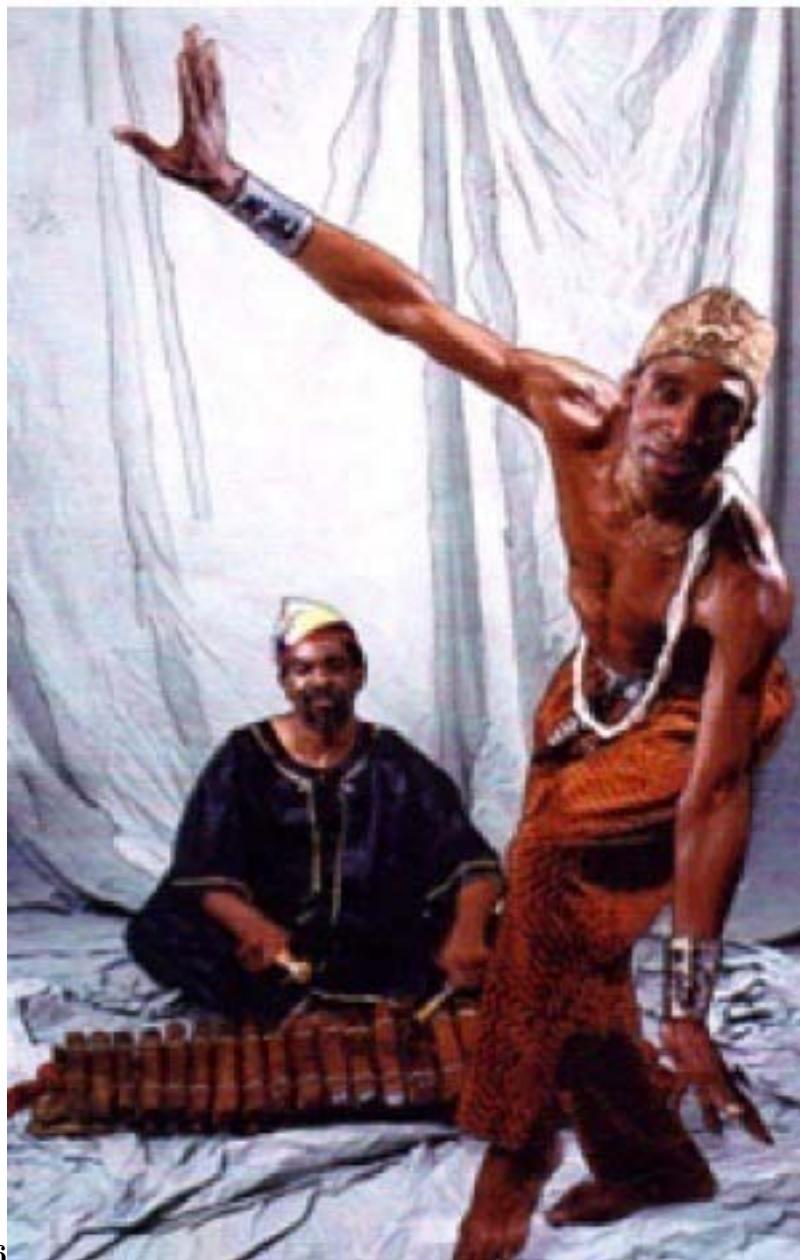
Figure 3: Figure 1 :Figure 2 :



Figure 4: Figure 3 :



Figure 5: Figure 4 :



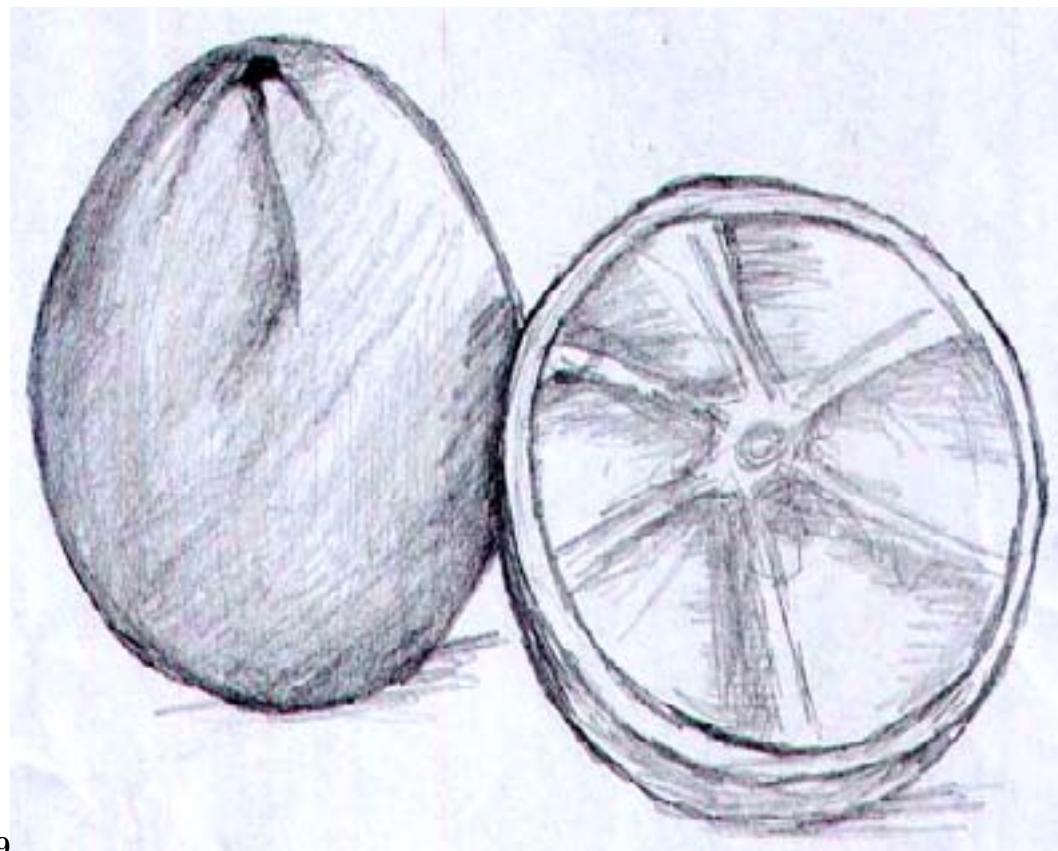
566

Figure 6: Figure 5 : 6 )Figure 6 :



78

Figure 7: Figure 7 :Figure 8 :



9

Figure 8: Figure 9 :



Figure 9:



---

353 [ From and With Each Other] , <http://www.aare.edu.au> From and With Each Other Kogan Press.

354 [ The World Book Encyclopedia ()] , *The World Book Encyclopedia* 2001. World Book Inc.

355 [ Encarta World English Dictionary ()] , *Encarta World English Dictionary* 2002. Bloomsbury Publishing Plc.

356 [Encarta ()] , Microsoft Encarta . 2007. 1993-2006 Microsoft Corporation.

357 [Downes ()] *A Learning Style is a Student's Consistent Way of Responding to and Using Stimuli in the Context of Learning*. Retrieved on 30 th April, S Downes . from [www.nwlink.com/doclark/hrd/styles.html](http://www.nwlink.com/doclark/hrd/styles.html) 2010. 2012.

360 [ J ()] *An Approach to Drawing*, J . <http://visualartseducation.suite.com/article.anapproachtoteachingdrawing> 2007.

362 [Mzokwana (2008)] *An Investigation into the factors affecting the pass rate of Grade 12 learners with specific reference to the English subject: A case study of selected schools in Libode District: MA Thesis*, N N Mzokwana . from [www.nmmu.ac.za](http://www.nmmu.ac.za) 2008. April 25. 2012. Nelson Mandela Metropolitan University. Retrieved on

365 [James ()] *Assessment, Teaching and Theories of Learning*, M James . 2006. London: Sage Publications Ltd.

366 [Boud et al. ()] D Boud , R Cohen , J Sampson . *Peer Learning in Higher Education: Learning*, 2001.

367 [Mitter and Howze ()] *Creating and Understanding Drawing, Studio, Aesthetics, Criticism, History*, G A Mitter , J Howze . 2007. New York, United States of America: Macmillan/McGraw-Hill.

369 [Blavatt ()] *Creative Metamorphosis: A Guide for the Artist in Everyone*, K Blavatt . <http://www.amazon.com/-CreativeMeta-morphosis-Guide-ArtistEveryone/dp/09641> 1993. 98 p. 2.

371 [Britannica ()] *Definition of Drawing*. United Kingdom. Encyclopedia Britannica United Kingdom Limited, Encyclopedia Britannica . <http://www.visual-arts-cork.com/drawing.htm> 2007.

373 [Douet ()] *Drawing for Pleasure*, V C Douet . 2000. Great Britain: Search Press Limited. p. 6.

374 [Merritt (ed.) ()] *Drawing for Pleasure*, M Merritt . Douet, V. C. (ed.) 2000. Great Britain: Search Press Limited.

375 [Drawing Made Easy: A Complete Online Drawing Course for Beginners Retrieved on 19 th November ()] 'Drawing Made Easy: A Complete Online Drawing Course for Beginners' . <http://theonlinedrawingcourse.com> Retrieved on 19 th November, 2006. 2012.

378 [South ()] *Drawing Value -Shading; Value Instead of Line*, H South . <http://drawsketch.about.com/od/learntodraw/u/> 2009.

380 [Ruskin ()] *Elements of Drawing*, J Ruskin . <http://www.howtodrawit.com/drawing/practice/exercise2.html> 2009.

382 [Bommer ()] *Exploring Drawing: A Guide for Teachers*, G F Bommer . 1999. Worcester, Massachusetts, United States of America: Davies Publications.

384 [Encyclopedia and Art ()] *Fine Art Drawing*, Irish World Encyclopedia , Art . <http://www.visual-arts-cork.com/drawing.htm> 2008.

386 [Miller ()] *Functions of Drawing*, M Miller . <http://www.nyu.edu/classes> 2008.

387 [Giles et al. (ed.) ()] *Improving the Quality of Teaching and Learning of General Knowledge in Art using Multiple Intelligences Lesson Plan*, E Giles , S Pitre , S Womack . Agbenatoe, W. G. (ed.) 2003. 2011. KNUST. (M. A. Thesis) (Department of General Art Studies)

390 [Artists ()] *International Dictionary of Art and Artists*, Artists . 1990. Chicago, United States of America: St. James Press.

392 [Learn and Improve your Drawing Techniques ()] *Learn and Improve your Drawing Techniques*, <http://www.drawingcoach.com/how-to-draw-caricatures.html> 2008.

394 [Learn and Improve your Drawing Techniques ()] *Learn and Improve your Drawing Techniques*, <http://www.drawingcoach.com/drawing-techniques.html> 2010.

396 [Larson and Mildred ()] *Meaning-Based Translation*, L Larson , I Mildred . 2002. Chicago: University of Chicago Press.

398 [Mednick ()] F Mednick . *Theories of and Approaches to Learning*. Retrieved on 16 th November 2013 from [www.cnx.org](http://www.cnx.org), 2006.

400 [Kochhar ()] *Methods & Techniques of Teaching*, S K Kochhar . 2004. New Delhi. Sterling Publishers Pvt. Ltd.

401 [Hampton ()] *Multiple Intelligences: Lesson Plan Ideas*, R Hampton . <http://Ith3.k12.us/rhthonlmlLessonPlanIdeas.html> 2009.

403 [Gardner ()] *Multiple Lenses on the Mind*, H Gardner . <http://www.howardgardner.com/papers/papers.html> 2005.

## 10 CONCLUSION

---

405 [Weber ()] *Student Interest, Empowerment and Motivation: Communication Research Reports*, K Weber  
406 . 10.1080/08824090009388747#.Ut6C8RDFLDc. <http://www.tandfonline.com/doi/abs/10.1080/08824090009388747#.Ut6C8RDFLDc> 2000. 17.

408 [Franzoni and Assar ()] 'Student Learning Styles Adaption Method Based on Teaching Strategies and Electronic  
409 Media'. L Franzoni , S Assar . [www.ifets.info/journal/12-4/3.pdf](http://www.ifets.info/journal/12-4/3.pdf) *Educational Technology and  
410 Society* 2009. 2013. 12 (4) p. .

411 [Wilson et al. ()] *Teaching Drawing from Art*, B Wilson , A Hurwitz , M Wilson . 1987. Massachusetts, United  
412 States of America: Davis Publications, Inc.

413 [Lee ()] *Teaching Philosophy*, D Lee . <http://dongjunelee.org/teac-hing.html> 2000.

414 [The Free Dictionary Drawing. Retrieved on 31 st September ()] 'The Free Dictionary'. <http://www.techniques-history.htm> Drawing. Retrieved on 31 st September, 2007. 2012.

416 [Kimon ()] *The Natural Way to Draw*, N Kimon . 2001. Boston, United States of America: Houghton Mifflin  
417 Company.

418 [Hailikari et al. ()] 'The Relevance of Prior Knowledge in Learning and Instructional Design'. T Hailikari , N  
419 Katajavuori , S L Yianne . [www.ncbi.nlm.nih.gov/pmc/articles/PMC2630138](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2630138) *American Journal of  
420 Pharmaceutical Education* 2008. 2013. (Pages 75-113)

421 [Stanfield ()] *Towards the Develop of a Games-Based Learning Evaluation Framework*, M Stanfield . <http://www.igi-global.com/chapter/games-based-learning-advancements-multi/18799> 2009.

423 [United States of America The New Encyclopedia Britannica, Macropedia ()] 'United States of America'. *The  
424 New Encyclopedia Britannica, Macropedia*, 2003. Encyclopedia Britannica Inc. 17. (Knowledge in Depth,  
425 15 th Edition)