

Full Length Research Paper

Ghanaian university students' perception of their readiness to teach cutting out of garments upon graduation

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The Universities of Cape Coast (UCC) and Education Winneba (UEW) are public universities in Ghana where students are trained to become teachers mainly at the secondary level. This paper was aimed at finding out the readiness of graduates from these two universities to teach cutting out of garments, through making pattern or cutting freehand, upon graduation. All final year students who had offered clothing as part of their programme during the 2013/2014 academic year were used for the study. A total number of 28 and 60 participants from UCC and UEW, respectively were employed for the study. The Statistical Package for Social Sciences (SPSS) was used for the analysis of the data collected. The data obtained were mainly described with the help of frequencies and percentages. The results of the study indicated that most of the respondents entered the universities directly from the SHS and did not have any freehand cutting skills prior to entering the university. Their skills in pattern making were also limited. On confidence in cutting out, patternmaking was higher than freehand cutting so was their confidence in teaching the two skills upon graduation. The differences between clothing and textiles major and food and nutrition major in terms of confidence in teaching both skills were about the same. It is recommended that a full 3-credit course in freehand cutting be introduced at the university level. More attention should also be paid to methods of cutting out at the SHS level.

Key words: Cutting out, confidence, teaching, teachers in training.

INTRODUCTION

Technical and Vocational Education and Training (TVET) is essential in the progress of a country as it allows individuals and societies to unlock their potentials and become accustomed to the transformations in the dynamic world (Nsiah-Gyabaah, 2009). Basically, the purpose of technical and vocational education is to equip young men and women with the technical and

professional skills needed for socio-economic development of a country (Charway, 2002). The Government of Ghana recognizes the strengthening of TVET as a means of developing the technical and skilled human resource base that Ghana needs as a key strategy for rapid economic growth and for the realisation of the Ghana vision 2020 plan. TVET is accordingly

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highlighted in Ghana Poverty Reduction Strategic (GPRS) document. One of the basic philosophies and orientations of Ghana's vision 2020 plan is to reform all Technical Vocational Education systems to make them more responsive to the national goals and global demands.

In line with this, the government of Ghana initiated the 1987 Education Reform Program (ERP) to reverse the decline in the education system (Forster, 2007). The decline in the economy, informed the government to make vocationalisation widely accepted as one of the key solutions to socio-economic decline. It was decided that education should prepare the youth for work. It was agreed that providing vocational education at the secondary school level would equip students with skills for paid and self-employment. The introduction of TVET subjects into the secondary school curriculum started in the mid-1960s, and in 1987 a comprehensive plan was initiated to make 'vocational education' an integral part of the secondary education system. Among the TVET subjects offered at the secondary level is Clothing and Textiles which is part of Home Economics.

The main aim of teaching Clothing and Textiles in Ghana is to train students to acquire knowledge and skills in clothing production and management (Ministry of Education, 2010). Clothing production is however of prime importance when it comes to skills acquisition for use, since most of the management functions of clothing in Ghana are performed by customers themselves.

The scope of the content of the Clothing and Textiles programme for Senior High Schools (SHS) has therefore been designed in a way as to offer skills that are terminal and can be put to immediate use apart from providing a foundation for further studies. The practical skills in clothing and textiles include the processes in clothing construction and cutting out. Most of the times, it seems, teachers' pay attention to the clothing construction processes. Students therefore make samples of the clothing construction processes like seams, stitches, collars and pockets and sleeves among others. Perfecting these skills will only be useful if one is able to cut out a garment properly and then use these constructional skills to put the pieces together to conform to the human figure. As indicated by Nakamichi (2016), there is a relationship between the three-dimensional structure of a garment and flat pattern pieces. To be able to produce garments that conform to the human figure there is the need for pattern making which help to shape a flat piece of fabric to conform to the human body (Bhati, 2018).

Clothing construction on the Ghanaian market is mainly freehand cutting based (Fianu and Zentey, 2000; Fianu and Acquah-Harrison, 1999), but pattern making becomes necessary when the design is complicated and using freehand cutting will not provide the desired fit (Foster and Ampong, 2012). At the SHS level, students are supposed to learn some amount of freehand cutting and pattern making to be able to meet the needs of the

Ghanaian market should they terminate their education at the SHS level. The implication of this is that there is the need for teachers themselves to have very good skills in freehand cutting and pattern making.

The responsibility for preparing teachers is assumed to begin with teacher education programs at higher education institutions. In Ghana, undergraduate students of the Universities of Cape Coast and Education, Winneba are trained to become teachers mainly below the tertiary levels of Education especially at the SHS level. The undergraduate programmes are taking for a period of four years. With regard to the Home Economics programme at University of Education, Winneba, undergraduate students take both food and nutrition and clothing and textiles from the first year of their study till the third year where they specialize in either of the two courses. For University of Cape Coast, undergraduate students specialize either in food and nutrition or clothing and textiles right from the first year to the final year.

The teacher is only as good as what she knows. In the clothing industry all over the world, Aldrich (2015) notes that flat pattern designing is widely used because of its accuracy and speed with which model sizes can be graded to get different sizes. Understanding pattern making is therefore important for success in the clothing industry. However, Assemblibooks (2013) stated that pattern making is a complex process that requires understanding of how the 3D curves of the human body can be translated into a 2D blueprint. Foster and Ampong (2012) noted that pattern cutting is a major factor in the production of well-fitting garments. Consequently, pattern making, adaptation and alteration form very important topics in the clothing and textiles programme at the Universities of Education, Winneba and Cape Coast. Very little of real free hand cutting is taught and lecturers normally teach the theory and leave the practical aspects for the students to explore (Forster and Adamtey, 2009). According to Wovenu (2007), at both the polytechnic and university levels, graduates have to go on attachment with established tailors and dressmakers to prepare them fully for the local market. He noted that the basis of these attachments is to perfect their skills in freehand cutting.

At the secondary level especially in the SHS, their curriculum requires that students are introduced to both freehand cutting and pattern making. With freehand cutting they are to construct at least a garment, which the students themselves cut out under the guidance of the teacher. With pattern making, students are to make basic blocks of the bodice, skirt, torso and shirt. They are also to do adaptations for princess line, horizontal yokes, dress blocks, simple shirt collar and A-line skirt. However, Gavor and Danquah (2018) noted that although what freehand cutting means together with its advantages and disadvantages are being taught in Ghanaian SHSs, very few students are exposed to the practical skill of free hand cutting. In addition, although

Table 1. Educational background of respondents before entering the university.

Assessment parameter	UCC No. (%)			UEW No. (%)		
	SHS	Others	Total	SHS	Others	Total
Clothing major	17	11	28	16	23	39
Foods major	NA	NA	NA	15	06	21
Total	17 (60.7)	11 (39.3)	28(100)	31 (51.7)	29 (48.3)	60 (100)
Gross total (%)			28 (31.8)			60 (68.2)

attention is paid to drafting of basic blocks, adaptations for various designs receive minimal consideration. The purpose of this study was therefore to assess how the students of the two tertiary institutions (Universities of Cape Coast and Education) perceive their performance in free hand cutting and pattern making skills and their confidence level in teaching cutting out upon graduation.

Objectives of the study

- i) Find out background of the students graduating to become teachers.
- ii) Assess the confidence they have in garment cutting skills.
- iii) Investigate the perception of respondents on the teaching of cutting out in the university.
- iv) Investigate any difference in the skills of students between freehand cutting and pattern making.
- v) Discuss any difference in cutting out skills between those who majored in foods and nutrition and those who majored in Clothing and textiles.

METHODOLOGY

The descriptive survey design was employed for the study and data was collected at a single point in time. All final year students of Universities of Education, Winneba and Cape Coast, 2013/2014 academic year who offered Home Economics were used for this study. Specifically for UEW, both food and nutrition and clothing and textiles students were used for the study since they all took clothing courses for three years, while the respondents from UCC were strictly students offering clothing and textiles. A sample size of 88 (28 from UCC and 60 from UEW) students took part in the study. The students were contacted just before they wrote their final year final semester examinations. These were therefore students who had fully completed their course at the university and are in a position to fully assess their own cutting out skills and what they acquired at the university. Questionnaire was used for data collection and it sought to find out the background of the students in terms of education before entering the university. The questionnaire also sought to find out how the students assessed cutting out training skills obtained before entering the university, and while in the university both formally and informally. Finally, the students were questioned on how they assessed themselves on their readiness to teach cutting out of garments upon graduation.

The questionnaire was given to the participants and they had one week within which to complete them. The Statistical Package for Social Sciences (SPSS) was used for the analysis of the data

collected. The data obtained were mainly described with the help of frequencies and percentages.

RESULTS

Educational background of respondents

To do a critical analysis of this study, the background of the students were sought in terms of the qualification with which the students entered the university. Tables 1 and 2 provide background information of the respondents in terms of entry qualification and majors at the university.

For the 88 respondents, 28 were from the University of Cape Coast while 60 of them were from University of Education, Winneba. 54.6% of the respondents entered straight from the Senior High School (SHS), while the rest entered, holding Teacher Training Diploma, Advanced Fashion Certificates or Polytechnic Higher National Diploma (HND). Fifteen (15) out of the 40 who did not come straight from SHS were higher national diploma holders from polytechnics. It is noted that at Winneba, students study both clothing and textiles and foods and nutrition, but major in one at the final year while at Cape Coast students study only one area. The sample therefore included 21 (23.9%) respondents who majored in foods.

Table 2 provides the route by which the students gained admission into the university. This background could help explain some of the responses provided. The results show that overall, most of the students entered as SHS graduates for both foods and clothing majors.

Respondents' knowledge in cutting out prior to entering the university

To find out the confidence of the respondents in cutting out and some factors that might have affected this confidence, students were questioned on skills they acquired before entering the university and the resources in terms of books in pattern cutting that they owned. Results are presented in Tables 3 and 4.

Table 3 provides a general overview of the cutting out skills acquired by all the students before entering the university. The results indicate that generally, at the

Table 2. Route of entry into the university.

Route	Foods major	Clothing major	Total
Post HND	1	14	15 (17.0)
Mature Exams	5	20	25 (28.4)
SHS Cert	15	33	48 (54.6)
Total	21 (23.9)	67 (76.1)	88 (100)

Table 3. Cutting out skills respondents acquired before entering the university.

Cutting skill	Yes [No. (%)]			No [No. (%)]			Total
	SSS	Others	Total	SSS	Others	Total	
Formal education in freehand cutting	08	08	16 (18.4)	42	29	71 (81.6)	87
Formal education in pattern making	11	15	26 (31.7)	36	20	56 (68.3)	82

Table 4. Cutting out skills that clothing major students acquired before entering the university.

Cutting skills	Yes [No. (%)]			No [No. (%)]			Total
	SSS	Others	Total	SSS	Others	Total	
Formal education in freehand cutting	08	08	16 (24.6)	26	23	49 (75.4)	65
Formal education in pattern making	11	14	26 (40.6)	20	18	38 (59.4)	64

formal education level, there was more training in pattern making than freehand cutting. Since it is not all the respondents who are majoring in clothing, it was assumed that those majoring in foods did not offer clothing at the formal secondary education level before entering the university. It was therefore necessary to take a closer look at those who were majoring in clothing and textiles.

Table 4 provides the skills acquired by clothing major students. It is assumed that those majoring in clothing and textiles either had a formal education in it before entering the university or have a good interest in clothing and textiles. The results in Table 4 indicate that more respondents had formal education in pattern cutting (40.6%) than in freehand cutting (24.6%). The results also indicate that out of the 34 SHS students who answered the question on freehand cutting, only 8 (23.5%) had training in freehand cutting and of the 31 who answered the question on pattern making, only 11(35.5%) had formal training in pattern making before entering the university.

The situation does not look very different with those who entered the university through routes other than SHS. It should however be noted that out of a total of 34 students of this nature, only 14 entered as graduates with HND background in fashion. Details of the data indicate that all the HND entrants had training in pattern making and 8 had training in freehand cutting at the HND level. The others who had entered mainly as mature

students had their highest educational level being Cert A Teacher Training or Diploma in Teacher Training. Most of these people were either SHS graduates or Form 4 leavers before entering the training college, therefore have similar experiences as the SHS graduates before entering the University.

The foregoing is an indication that skills in cutting out is not being taught in most schools below the tertiary level although it is part of the syllabus. Where it is taught, the concentration seems to be on pattern drafting with little attention given to freehand cutting.

Skills acquired while studying at the university

Table 5 shows results in pattern cutting skills acquired while in the university. It is evident from the results that both universities emphasize pattern making which confirms the assertion by Foster and Ampong (2012).

Of the 86 students that responded, 65 said they were taught both freehand cutting and pattern making at the university while 21 of them indicated they were taught pattern making skills only. The reasons given by students on their assessment of the way freehand cutting is taught at the university explains this trend in the results. At the University of Education, Winneba, most of the students noted that they are not taught freehand cutting in the classroom by any lecturer. Students are made to go to established seamstresses

Table 5. Pattern cutting skills acquired by respondents while at the university.

Cutting pattern	Pattern only	Freehand only	Both	Total
Method of cutting taught at the university	21 (24.4)	00 (00.0)	65 (75.6)	86
Skill type learnt outside	03 (05.4)	45 (80.4)	08 (14.2)	56
Method used personally	26 (34.7)	12 (16)	37 (49.3)	75

where they learn the procedure and come back to school to do a presentation. At Cape Coast, a few students noted that they had to learn the procedure from their friends and lecturers gave very little formal lecture on the procedure. These respondents who said they were not taught freehand cutting probably felt they learnt the method on their own with very little or no involvement of the lecturers. Probably, the 76% who said they were taught both methods of cutting out did not consider how well the courses, especially freehand cutting, were taught. They might also have considered the fact that the university is a place where one can be given guidance on what to learn and not always have the lecturer giving you information so going out to gather information is part of the learning process.

Table 5 shows that majority of the students learnt freehand cutting in the informal sector. This number of students learning freehand cutting outside the university lends credence to the fact that students' are sent to the sewing industry by one of the universities to learn the skill. The students gave various reasons for learning cutting out skills outside while still in the university. These included the fact that free hand cutting is fast and easy; to help improve their skills in cutting out using freehand and because very little freehand cutting is taught in formal education.

Since practice makes perfect and improves ones confidence in a skill, the researchers wanted to find out the number of respondents who engaged in sewing. Table 5 also shows that majority of the respondents' practice the skill of sewing clothes and that they use more of pattern making than freehand sewing with 37 out of 75 respondents using both methods. Those who used pattern only when sewing indicated that it provided very good fit; it was the only method they were trained in, and is more efficient and accurate.

Reasons for using freehand cutting alone includes; it is easy, convenient and very fast; it is easier and faster as compared to pattern making; it is the fastest and most effective way of cutting out; free hand cutting is fast and convenient and helps to increase production to meet market demand.

For those who used both methods, reasons included that sometimes complicated styles patterns are used to achieve the desired effect; freehand was used when the design is simple and pattern was used when the design is complicated; patterns make the garment come out very well especially at the bust area but it is easier to

use freehand cutting for simple styles.

Rating of skills taught in cutting out while at the university

The students used for this study were trained to become teachers. It was therefore important to find out how they assessed the skills they had acquired in training. The results are presented in Table 6.

On respondents ratings of the skills taught and their own levels of skills, most of the students noted that the teaching of pattern making at the university was going on well (70.5%) with 21.6% saying it was very good and 48.9% saying it was good. Only two students said it was poor, while none of the respondents indicated that it was very poor. On free hand cutting, however, only 29.7% indicated that university teaching was going on well. It is noted, however, that although about 22% of the students stated that the teaching of pattern making was very good. Only 5% had the same impression about freehand cutting at the university. On the other hand, while nobody said teaching pattern making at the university was very poor, 15.9% said the teaching of freehand cutting at the university was very poor.

Learning outside the formal sector got ratings of 72 and 82% for patterns and freehand cutting respectively for the teaching being alright. The rating of freehand cutting taught outside the university was much better than that within the university since very little freehand cutting is taught by the university lecturers themselves.

Rating of personal skills in cutting out and ability to teach cutting out

Graduates should have good confidence in their own skills to be able to teach it well. When respondents were asked to rate their own skills in the two common methods of pattern cutting used in Ghana, 31% said they were very good in pattern cutting while 42.5 % noted they were good providing a total of 73.5% who felt competent in pattern making. On free hand cutting, 18% said they were very good while 37.5% said they were good giving a total of 55.5% who were competent in free hand cutting.

When asked their ability to teach the two skills on graduation, a total of 78% provided ratings of good and

Table 6. Respondents' interest in clothing construction and rating of skill learnt.

Skill learnt/rating	VG(5)	G(4)	AV(3)	P(2)	VP(1)	Total
Interest in clothing	30 (34.2)	34 (38.6)	20 (22.7)	03 (3.4)	01 (1.1)	88
Teaching pattern in University	19 (21.6)	43 (48.9)	24 (27.3)	02 (2.3)	00 (0.0)	88
Teaching freehand in University	05 (5.7)	24 (27.3)	26 (29.5)	19 (21.6)	14 (15.9)	88
Teaching pattern outside University	17 (36.2)	17 (36.2)	10 (21.3)	01 (2.1)	02 (4.2)	47
Teaching freehand outside University	23 (35.4)	30 (46.2)	10 (15.4)	01 (1.5)	01 (1.5)	65
Personal skills in pattern making	27 (31.0)	37 (42.5)	19 (21.8)	03 (3.5)	01 (1.2)	87
Personal skills in freehand cutting	16 (18.2)	33 (37.5)	25 (28.4)	09 (10.2)	04 (5.7)	87
Self-preparedness to teach pattern making	22 (25.3)	46 (52.9)	14 (16.1)	04 (4.6)	01 (1.1)	87
Self-preparedness to teach freehand cutting	17 (19.5)	28 (32.2)	33 (37.9)	07 (8.1)	05 (2.3)	87

Table 7. Difference between foods and clothing majors in ratings of skill learnt.

Skill learnt/rating	VG(5)	G(4)	AV(3)	P(2)	VP(1)	Total
Food major						
Interest in clothing	05 (23.8)	10 (47.6)	05 (23.8)	01 (4.8)	00 (00.0)	21 (100)
Personal skills in pattern making	07 (33.3)	09 (42.9)	05 (23.8)	00 (0.0)	00 (0.0)	21 (100)
Personal skills in freehand cutting	04 (19.1)	09 (42.9)	05 (23.8)	02 (9.5)	01 (4.8)	21
Self preparedness to teach pattern making	07 (33.3)	08 (38.1)	05 (23.8)	01 (4.8)	00 (0.0)	21
Self preparedness to teach freehand cutting	03 (14.3)	11 (52.4)	05 (23.8)	02 (9.5)	00 (0.0)	21
Clothing major						
Interest in clothing	25 (37.3)	23 (34.3)	16 (23.9)	02 (3.0)	01 (1.5)	67
Personal skills in pattern making	20 (30.4)	28 (42.4)	14 (21.2)	03 (4.5)	01 (1.5)	66
Personal skills in freehand cutting	12 (17.9)	24 (35.8)	20 (29.9)	07 (10.4)	04 (6.0)	67
Self preparedness to teach pattern making	14 (21.9)	38 (59.4)	8 (12.5)	03 (4.7)	01 (1.6)	64
Self preparedness to teach freehand cutting	14 (21.5)	15 (23.1)	15 (23.1)	19 (29.2)	02 (3.1)	65

very good for pattern making while 51% gave the same ratings for freehand teaching with only 22 and 17 out of the 87 students who answered this question saying their ability to teach pattern making and freehand cutting respectively was very good.

Differences between food and clothing students in preparedness to teach cutting out

Twenty-one of the students used were majoring in foods and nutrition while 67 were majoring in clothing and textiles. It was necessary to find out the difference in the two groups since even the foods major respondents may end up teaching clothing and textiles upon graduation. The results between the two groups are presented in Table 7.

Table 7 reflects respondents' majors and their interest in clothing. 81.6% of clothing students and the 71.4% foods majors showed interest in clothing. With pattern cutting skills and ability to teach cutting out, the differences were negligible except for preparedness to

teach free hand cutting where interestingly the food major students seem to be a little more prepared. This, could probably be due to the fact that the student of clothing being more exposed to the skills, are more critical than the foods students.

DISCUSSION

Jauch and Traub-Merc (2006) observed that during the first two decades of independence, the textile sub sector was a major contributor to employment and economic growth in Ghana. The clothing sector also being one of the largest worldwide, Ghana stands to benefit a lot if teacher education emphasizes vocational and technical skill training in relevant and employable skills (Foster and Ampong, 2012) especially in the area of clothing construction where the equipment needed to start on one's own are not very expensive. The fact that most of the teacher trainees (56 out of 88) agreed that they were engaged in some form of training in cutting outside formal education, and 75 of them sew on their own,

shows their enthusiasm to perfect their skills and also fill in on what they will not learn in the classroom.

The acquisition of training informally confirms Forster and Ampong's (2012) suggestion that the skills they learnt in school were inadequate for what were required in the Small Scale Garment Industry. Though it is important for students to learn the global methods of cutting patterns for garments, they must also acquire skills with which they can work within their immediate environment (Forster and Ampong, 2012), which is shown by the fact that most of the students found it necessary to learn freehand cutting outside. In Ghana, using pattern work is expensive and reserved for selected clients and articles where appropriate monies can be charged. It is therefore not to the benefit of the respondents to be provided more skills in patternmaking than freehand cutting.

The finding that a reasonable number of the potential teachers cannot teach freehand cutting is an indication of a vicious circle being perpetuated. The teachers do not know enough freehand cutting to teach it when they graduate so the graduates who leave the secondary schools and other schools below the university where these graduates teach, do not actually have any strong basis for continuation or termination. This state of affairs provides a basis for the observation by Wovenu (2007) that many students in Universities and Polytechnics in Ghana went into part time apprenticeship training from Small Scale Garment producers while still in school or after graduation, to develop their competencies in freehand cutting before they could teach clothing courses, and engage in garment production. Meanwhile, Fianu and Zentey (2000) observed that large scale fashion designers they studied in Accra had their training mainly in freehand cutting, which is an indication of the importance of this skill in the fashion industry in Ghana. 72.8% of the respondents had very high and high interests in clothing construction which could explain why they decided to go in and improve their skills outside beyond what is given them at the university.

Most of the students sew clothes on their own which is impressive since practice makes perfect and this practice will help them improve their cutting skills. 49, 35 and 16% of the students who sew clothes on their own use both methods, patterns only and freehand only respectively. This is an indication that at least 65% of the students who sew on their own practice free hand cutting while 84% practice pattern work. In terms of their own confidence level, students were more confident in their own pattern cutting skills (74%) and their level of preparedness to teach pattern work (78%) than their confidence (56%) and preparedness to teach freehand cutting (51%). The lower levels expressed in freehand cutting could be traced to the fact that little attention is given to freehand cutting while the focus of attention is on pattern work throughout the education system. This is evidenced by the fact that even before entering the

university, only 21% of respondents had been exposed to freehand cutting and 31% to pattern work.

Although these percentages could be influenced by those who did not offer clothing before entering the university, of the 67 who were supposed to have learnt clothing before entering the university, 49 did not learn freehand cutting while 38 did not learn pattern work. All those who did not learn pattern work were from the SHS. If very little attention is given to both forms of cutting out at the SHS level then it means there is very little basis for lecturers at the university to build on when the students enter the university. Since at the university level clothing production is taken along other courses in clothing and textiles and education and for those in Winneba, it could be a minor course. A fair base in cutting out at the pre-university level will prepare the graduates to perfect the skills better at the university. It also means that in a first year clothing class at the university where entrants are only SHS students, about two thirds of the class have no background in cutting out. If little attention is given to cutting out at the SHS level, then when students enter the university the lecturers would have to start virtually from the scratch instead of building on the skills that the students should have acquired earlier on. This means the lecturers may have to rush through or leave some other content untaught. It must however be noted that in this research, perception rather than skills was measured, which is a limitation to the study. Further research is suggested to assess students actual skills in cutting out to better understand the situation studied.

Conclusion

Majority of students being trained by the two teacher universities in Ghana entered straight from the SHS with the rest being polytechnic students with HND and then post secondary trained teachers who had been teaching for some time. Before entering the university most of the students had not had any training in the formal system in free hand cutting while majority of the SHS students did not have any background in pattern work either. With this background before entering the university, it means the universities have to start teaching both freehand cutting and pattern making from the scratch. The study confirmed earlier studies that pattern making is taught well in the universities while very little freehand teaching is done. Graduates from the two teacher universities are however generally prepared to teach garment cutting out using pattern cutting upon graduation; however, their confidence in the use of freehand cutting is relatively low.

Recommendations

In view of the fact that both pattern making and freehand

cutting are part of the SHS syllabus, it is recommended that just as student teachers are given step by step methods in pattern work, they should be given the same attention in freehand cutting. If possible, one course at the university level should be devoted totally to freehand cutting using the principles of pattern drafting as a basis. At the secondary level, more supervision should be put in place to make sure that the content in pattern making and freehand cutting which is part of the syllabus is treated in teaching the students. Freehand cutting should also be emphasized more at the polytechnic since they are being trained for the Ghanaian market first before the international market; more so, when they are being trained to go more into self-employment where research has indicated that free hand cutting is the main method used. In self-employment, they have to compete with others in terms of how fast they produce and may have apprentices who will need training in freehand cutting. Further research is also suggested where a comparison can be made between programmes and universities to broaden the research area.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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