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Millinery Art Skills Acquired and Used by Higher National Diploma (HND) Fashion Design Students during Industrial Internships

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Abstract

Millinery art skills acquisition has faced many challenges, even though it has a high potential to support students' performance in the fashion design industry. This study examined millinery skills acquired and practised during an internship by Higher National Diploma Fashion Design students in Technical Universities. It is part of a more extensive study on millinery skills acquisition and utilisation by Higher National Diplomat students in fashion. The study population

was 249 level 200 students and 28 industry supervisors. The study used multistage and stratified sampling techniques to collect student data, while industry supervisors were purposively selected. Data was collected using a semi-structured questionnaire and interview guide. The study data was analysed using frequency tables to determine millinery art skills acquired and used by the students during the internship. Findings indicated that the students lack skills in blocking, fabric manipulations and decorative techniques to embellish millinery products. The study also revealed that most fashion industries where the students went for the internship were not practising millinery skills. Also, those practising millinery art demanded payment before accepting the students on internship. Based on the findings, three virtual contents were developed on the skills gaps identified in the study. The virtual online content was communicated to the participant institutions in the study to help bridge the skill gap identified in the study. The study recommended purposeful industry linkage by the fashion departments with industry experts in millinery to support the training of fashion design students.

Key words: *Millinery skills acquisition and utilisation, Fashion*

Introduction

The culture of beauty is shaped by various factors such as tradition, environment, status, personal taste, and preference. Dressing accessories are as essential as clothing because they communicate an individual's values, beliefs, attitudes, and assumptions (De Carvalho, 2020). Accessories are an important part of creating a stylish look, and they can be divided into two categories: worn and carried. Worn accessories include earrings, gloves, hats, fascinators, hair bands,

and footwear. On the other hand, carried accessories include items like bags, clutches, fans, parasols, and others (Ribeiro et al., 2012).

Millinery is the art of designing and making hats and headdresses, which is as old as dressmaking. It is one of the creative aspects of fashion design education or training. Dressing the head has been a tradition throughout history, with different styles of headwear being used at specific times. This tradition dates back to 3000 B.C.E., as evidenced by artefacts in Egypt and North Africa (Tia, 2016). At that time, millinery products were mainly used as protective coverings for the head against harsh weather. The art of millinery was integrated into technical institutions and universities across Ghana in 1963, where it is studied in the fashion departments.

Fashion Design and Technology is a skill-oriented course of study in technical universities in Ghana that produces graduates who feed the fashion industry. However, the performance of industry graduates largely depends on the level and quality of skills they acquire during their training/education (Ayonmike, 2014). The acquisition of high-level skills cannot be achieved if the programme's facilitators are not proficient and the equipment is obsolete (Agordah et al., 2023). This situation makes it difficult for learners to follow well-defined instructions to acquire millinery art skills (Vishwaroop, 2022; Auta & Giwa, 2020).

Williams and Laing (2013) stated that limited research has been conducted on millinery art, although it is taught in the formal sector. Even though previous fashion researchers have overlooked millinery art, it strongly connects to the head, face, and clothing. Fashion experts predicted that accessories would be more critical since

consumers would be interested in quality clothes, not clothes with a short fashion life (Marjorie & Baker, 2013).

This implies that the consumer will prefer quality clothes in smaller quantities and instead have a range of accessories that could easily make basic clothes versatile. This calls for effective skill acquisition in millinery art to grant learners practical skill usage to enhance performance in the fashion industry. Therefore, this paper reports an investigation in the millinery art skills acquired and used by fashion design students during an industrial internship in Ghana's fashion industry.

Literature Review

Millinery Art Skills

Millinery products promote elegance in dressing, and they always define the wearer whenever they are used to accessorise garments. Variety in millinery art products is observed in different periods; these define the evolution of fashion in those periods. However, in Africa, as stated by Tia (2016), hat-making started in 3000 B.C.E. and was mainly used for protection from the harsh weather along with typical traditional headdresses.

Custom-made headdresses and clothes are classy, with unique features usually considered based on the wearer's status, figure type, type of material used, and quality (McQuerry, 2019). This makes millinery art a unique skill that needs to be acquired alongside garment design and construction. Accessorising one's clothing product shows the difference between a fashion designer and a garment producer.



Samples of custom-made hats and fascinators

Source: Agordah, 2022

Due to the uniqueness of millinery art headdresses, young designers in fashion institutions need to acquire millinery art skills and use them to accessorise their clothing designs to enhance their production and exhibit the difference between them and traditional dressmakers (Fowler, 2019). Millinery art skills in draping/moulding, fabric manipulation, embellishing/decoration and hand-stitching are essential (McQuerry, 2019). As Coleman (2021) stated, contemporary fashion has taken over the fashion industry in Africa, and special events are flooded with sophisticated female headdresses. Fashion education should prioritise teaching millinery art skills to technical university students to reduce the need for importing millinery products into our markets.

Based on Agordah and Isika's research in 2023, it was found that fashion design students who did not acquire skills in draping/blocking cannot construct millinery art products professionally. This implies that draping/blocking skills are essential in millinery art practice. Agordah et al. (2023) also stated that skills in hand-stitching are a prerequisite for acquiring millinery art because elegant millinery art

products are uniquely hand-stitched inconspicuously. This paper reports a study that investigated the millinery art skills HND fashion design students acquired in technical universities and used during an industrial internship in the fashion industry.

Utilisation of Millinery Skills in the Fashion Industry

Literature on fashion design states clearly that there is a difference between a fashion designer and a dressmaker. Fashion designers design and produce garments with possible accessories to enhance the total presentation of their designs.

However, dressmakers only produce garments without considering the total presentation of their work with accessories. Dressing is complete when a garment is accessorised because accessories complement or accentuate individual styles (Ericol Fashion, 2019; Rodriguez, 2020). Choosing and wearing the right dressing accessories can make or unmake one's dress. Hence, fashion design students need to acquire millinery art skills to accessorise their designs and achieve excellent presentations to the public.

The ability to design and produce hair brooches, fascinators and hats adds significantly to the style of simple wear, making it classy. This can be easily made with fabric pieces usually disposed of in the fashion industry; with fabric manipulation skills, most of the fashion industry waste can be taken care of creatively. This encourages sustainable fashion practices and reduces the quantity of fashion waste in the environment (Sai et al., 2022).

According to Niinimäki et al. (2020), the fashion industry is the second largest industrial polluter after aviation globally, accounting for up to 10% of emissions.

Furthermore, most fabrics/clothes produced by fast fashion are inorganic and synthetic. Although the production of these materials can have negative environmental impacts, such as the release of harmful chemicals and greenhouse gases (Kumar et al., 2020), they are suitable for manipulation by pleating and gathering to make headdresses that add value to the garment while helping reduce waste and increasing their fashion life. Fashion design students can enhance their garments by creating hair brooches and fascinators using fabric manipulation techniques. The student's ability to practise millinery art skills during industrial internships depends on the skills they have acquired in fashion design at technical universities.

As Fowler (2019) states, every fabric piece can be used to make headdresses. It all depends on the individual's skills. This is because the ability to use the needle and thread to present a design idea as a headdress is a skill. This implies that the ability of learners to exhibit this skill in the industry mainly depends on the skills acquired in millinery art at the technical universities. Blocking/draping skills are essential when using linen, ramie, felt, sinamay, cotton, and parasal textiles.

Studies by McDowell (1992) stated that millinery was practised since 1890 and alongside dressmaking. The training period, as stated by Mark (2011) at that time, was three to four years. Millinery art has evolved over the years just as dressmaking and different periods have observed several varieties alongside clothing styles. Currently, millinery art is being studied in vocational/technical institutions worldwide, including Technical Universities in Ghana.

A study by Ananga et al. (2016) focused on skills acquired by graduates of Technical Universities and highlighted deficiencies in their skills in meeting industrial needs. Allsop (2017) looked at the skill gap in fashion education and stated that fashion design graduates do not have enough skills to perform effectively in the fashion industry. Although these studies focused on the level of skills acquired by the graduates in the Technical Universities, they did not address the skill gap in millinery art as a unit course of study. In addition, using technological tools to enhance skills acquisition is an understudied area in most fashion-related education in Africa, thus a significant gap to address.

Chepchumba and Cheruiyot (2018) examined the challenges facing the fashion programme in Kenya. Isika et al. (2016) also studied the competencies of fashion design instructors in draping in Kenya, which gave excellent views on gaps in the fashion design programme. Obinim and Pongo (2018) and Foster and Ampong (2012) focused on competent pattern-making skills in Ghana. These scholars did not specifically address the skills gap in millinery art skills, which requires more interrogation.

Wovenu (2017) also looked at constraints hindering the employment of fashion design graduates in Ghana's fashion industry. He found, among others, that the skills acquired by graduates in millinery art are low and cannot help them operate in the fashion industry. This study, however, did not focus on internships and how the skills acquired in the institution are practised during this period. To fill this research gap, this study investigated how students use millinery art skills during their internship in the fashion industry.

Importance of Online Virtual Content in Effective Skills Development

Elhashash and Elhashash (2023) stated that virtual teaching content is integral to e-learning, enabling learners to easily access and practice independently. This tool is handy for skill development as it eliminates the constraints of time and place, unlike real practical labs. With virtual teaching content, learners can enjoy a more flexible schedule, reduce the cost of their degree and further their education alongside their career development (Onele, 2023; Haleem et al., 2022).

Research shows that online virtual content can help individuals acquire and develop skills. Eib (2022) suggests that digital content can help students make up for the learning loss they experience. As students are only in school for a limited period, reaching them becomes challenging after graduation. Therefore, it is vital to make study findings accessible online for current students and graduates to address this issue. Online virtual content is easily accessible and can help learners fill the gaps in their skill sets (Haleem et al., 2022). For example, fashion design graduates can easily enhance their skills in the fashion industry using online resources. As a result, this paper presents online virtual content developed to address the skills gaps identified in the study of millinery art skills deficiencies of fashion design students.

Training in millinery art skills is an important area lacking sufficient fashion research. To address this gap, online content is needed to support fashion design graduates and fill the identified gaps in the study. The study's results help bridge the millinery art skills training gap in fashion curriculum review. This support is also essential for

those interested in practising millinery art in the fashion industry but lacking the essential skills, as indicated (Wovenu, 2017).

It is also necessary to analyse how students apply millinery skills acquired during internships in the fashion industry. The findings on millinery skills acquired and used during the industrial internship are given maximum attention to support millinery art skills transfer challenges in fashion design at technical universities. The flexibility in the use of virtual content online grants the young graduate to update their skills deficiencies at their own convenient time (Marbun, 2023). This is because online content can be used anytime if the learner is interested (Camarinha-Matos et al., 2001).

Results

Millinery Skills Acquired by HND Fashion Design Students

The study aimed to investigate millinery art skills acquired by fashion students. Fashion students often envision their design ideas and bring them to life through design. This process helps them develop the necessary skills to turn their ideas into actual products. Table 4.3 summarises the students' millinery art skills in designing brooches, fascinators, and hats.

Table 1: Students' Rating of their Skills in Designing Millinery Products

Millinery Product	Responses (frequencies and percentages)		
	Good	Fairly Good	Poor
	f (%)	f (%)	f (%)
Hair brooches	79 (31.7)	45 (18.1)	125(51.2)
Fascinators	94 (37.7)	33 (13.2)	122 (48.9)
Hats	90 (36.1)	37 (14.9)	108 (43.3)

Source: Study Data 2021 N = 249

Table 1 shows how fashion design students rated their skills in designing millinery products: 31.7%, n = 79, rated their ability to design hair brooches as good. Regarding rating their ability to design fascinators, 37.7% n = 94. On rating students' ability to design hats, 31.7% n = 90 rated their ability as good. This means many fashion design students did not acquire enough millinery art skills to design garments with headdresses to enable them to make a complete fashion statement.

The above situation is challenging because if accessories are not selected professionally, it negatively affects the complete presentation of the design. The study further explored students' ability in four essential skills in millinery art. Table 4.4 measures millinery art skills acquired in constructing millinery products by the students in blocking/draping, fabric manipulation decoration, and hand stitching.

Table 2: Students Rating their Skills in Constructing Millinery Products

Variables	Responses (frequencies and percentages)			
	Good	Fairly Good	Poor	Total
Hair brooch	77 (30.9%)	47 (18.9%)	125 (50.2%)	249 (100%)
Fascinator	92 (36.9%)	31 (12.4%)	126 (50.6%)	249 (100%)
Hats	103 (41.3%)	37 (14.9%)	109 (43.7%)	249 (100%)

Source: Study Data 2021

Table 2 shows the results from the analyses of HND Fashion Design students' self-rating of their ability to construct millinery products. As the table indicates, 50.6% n = 126 have poor skills in constructing brooches, 50.2% n = 125 said their ability to construct fascinators

was poor, and 43.7% n = 109 stated their skill was poor in constructing hats.

Many fashion design students have not acquired the technical skills to construct headdresses (fascinators and brooches), but only 41.3% of students claimed they possessed the skills to construct hats. The research supports Agordah et al. (2023) finding that fashion design students lack essential skills in millinery art.

Table 3: Students' Rating of Training Received in Millinery Art as Fashion Design Students

Rating Scale	Responses (frequencies and percentages)
Very poor	41 (16.5%)
Poor	52 (20.9%)
Fairly Good	47 (18.9%)
Good	98 (39.4%)
Excellent	11 (4.4%)
Total	249 (100%)

Source: Study Data 2021

Table 3 shows HND Fashion Design students' self-rating of the training received in millinery art: Only 4.4%, n = 11, of the students stated their training was excellent. This finding is evident in the study of Agordah et al. (2023) on the unavailability of instructional resources for millinery art skills training of fashion design students at technical universities. This is a significant challenge that considerably impacts the employment of fashion industry graduates.

Industry Supervisors' Views on Millinery Art Skills Acquired by the Students

The fashion industry supervisors have proposed leading suggestions for fashion design departments in technical universities to help students acquire the necessary skills in millinery art. One main proposal the industry supervisors is collaboration with millinery art experts in the fashion industry to facilitate millinery art skills acquisition in fashion design. They also recommend that sufficient time for practical lessons within the Fashion Design curriculum is essential. Typical comments are as follows: -

The fashion departments need to collaborate with experts in millinery to support the departments in millinery skills acquisition (35%, 10)

The fashion design departments should allocate enough practical time for skills training in millinery art skills (46%).

Millinery skills students need to acquire include hand stitching neatly with little or no trace. This is important. I observed that many students are struggling with this. The training needs to be strengthened in this area (46%).

Views of industry supervisor on the level of millinery skills acquired by the student interns. Typical comments included the following: -

Their millinery skills are not the best, and the students need to be taught well; things are swift these days (35%, 10).

Lecturers should be encouraged to attend workshops organised by milliners in the fashion industry. Students should be taught

more practical lessons on how to use most of the fabrics in constructing structured headdresses (44%)

Support for millinery skills acquisition must be purposeful. I can be a resource person if your school is ready to pay for my skills (industry supervisor/contact 14%, 4)

It will be helpful for institutions to develop the capacity to support millinery skill acquisition specifically. They may need to recruit staff specifically for that purpose (industry supervisor 39%, 11)

The feedback offers valuable insights into assessing the millinery art skills acquired and used by the fashion design students at Technical University in Ghana. The comments suggest collaborating with fashion industry experts to implement the millinery art curriculum that is more relevant to the skills needed by the fashion industry.

The suggestion to increase contact hours for practicals to improve millinery arts skills development is laudable. Additionally, students need to acquire the skills of constructing millinery products using various fabrics to acquire more practical experience.

Table 4. Millinery Products Students Practise During Internship

Making of Millinery items	Always	Sometimes	Rarely	Never	Not Sure
	f (%)	f (%)	f (%)	f (%)	f (%)
Hat	0(0)	58(23.3)	40(16.0)	105(42.2)	46(18.5)
Fascinator	20(8.0)	52(21)	10(4.0)	112(45)	55(22.1)
Brooch	0(0)	15(6.1)	86(34.5)	106(42.6)	42(16.8)

Source: Study Data 2021 N = 249

The student's results on the usage of the millinery skills in the fashion industry during the internship indicated that none 0% of the students always used the millinery skills in making hats, 8% n = 20 in fascinator making, and 0% n = 0 in making hair brooches. This confirmed the findings in Table 4.2 that most fashion industry students who had industrial internships do not accessorise their garments. This implies weak industrial support for the skills practised in millinery art in the fashion industry.

Table 5: Students Rate Millinery Skills Practise during Internship in the Fashion Industry

Description	Range	Responses (frequencies and percentages)
Very Poor	0-20	52 (20.9%)
Poor	21-40	90 (36.1%)
Average	41-60	83 (33.3%)
Very Good	61-80	22 (8.8%)
Excellent	81-100	2 (0.8%)
	Total	249 (100%)

Source: Study Data 2021 N = 249

The study found that the students' millinery skills practised in the fashion industry during the internship were low. Only 0.8% n 2 rated the practice of millinery as excellent, while 36.1% n = 90 and 20.9% n = 52 rated their use of acquired millinery skills as poor and very poor, respectively. This situation is concerning because the industrial internship is meant to expose students to industrial techniques and millinery art skills in the fashion industry.

Virtual Online Content on Millinery Skills Gaps

Table 3 clearly shows that more than half of students indicated not acquiring average skills in constructing hats, brooches, and fascinators. These unique headdresses allow fashion designers to make a complete statement by dressing the head to complement garments. Skills such as blocking/draping and fabric manipulation are essential in making millinery products (Fowler, 2019).

Stitching to assemble parts of headdresses facilitates creative assembling techniques in millinery art skills. The findings reported here bridges the skills gaps by developing virtual content on YouTube to support fashion design students on methods of blocking/draping. The link to the practical demonstration can be viewed on: <https://www.youtube.com/watch?v=t7v1jZyP-IQ&t=13s>

Millinery products that are structured and have smooth finishes are highly sought after by fashion icons who present themselves comprehensively to communicate their identity. Fabric manipulation is also an essential skill in creating her brooches. Students' indicating that they do not have these skills in making brooches imply a lack of skills in manipulating fabrics for headdresses. Hence, the results fill this skill gap using content on YouTube on fabric manipulation skills that can be viewed on <https://www.youtube.com/watch?v=ux60DZ-cdnc>.

Various stitches such as blanket, double, wire, and sab are used to firmly assemble the parts of the hat's brim and crown, while edges and embellishments are stitched. Students must possess the skill of stitching without leaving any noticeable marks after assembling headdresses. This skill is essential for them to be competitive in the

fashion industry. To bridge this gap, online virtual content seen on https://www.youtube.com/watch?v=a8_jOlyIfK0 can assist them.

Conclusion

This study explores the millinery art skills acquired and used by fashion design students during their internships in the fashion industry. The study revealed significant gaps in the students' acquired millinery art skills, with most students having below-average skills in constructing brooches and fascinators (as shown in Table 3). The students also indicated that their training in millinery art has not been very good (as shown in Table 4). Additionally, the study found that most student interns did not have the opportunity to utilise their millinery art skills during their industrial internships since some fashion industry members do accessorise their products.

This implies limited capacity for industrial internship support in the fashion industry in millinery art. As a result, students in internships have fewer opportunities to practice their millinery skills and cannot gain any experience applying these skills in the fashion industry. This is a niche area the fashion departments need to pay attention to for their graduate to perform better in the fashion industry. The virtual content practical production process will be a reference for students to help them develop their millinery art to bridge the skills gap.

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