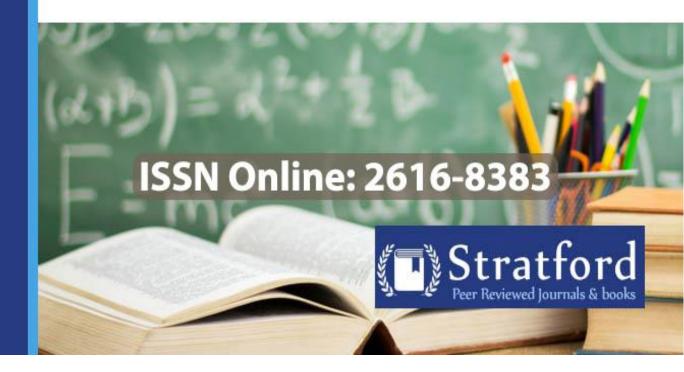
Journal of Education



Relationship between Millinery Curriculum Content and Millinery Skills Acquired by Higher National Diploma Fashion Design Students

Dr. (Mrs.) Faustina Emefa Agordah, Dr. Isika Juliet Kaindi & Dr. Kisato Jacqueline

ISSN: 2616-8383

Email: info@stratfordjournals.org ISSN: 2616-8383



Relationship between Millinery Curriculum Content and Millinery Skills Acquired by Higher National Diploma Fashion Design Students

¹Dr. (Mrs.) Faustina Emefa Agordah Takoradi Technical University, Ghana Department of Fashion Design and Technology Email: tinaagordah@gmail.com, gbeddieemefa@students.ku.ac.ke ORCID ID: 0000-0002-7340-1265; Phone: +233 244 469 327

> ²Dr. Isika Juliet Kaindi Department of Fashion Design and Marketing Kenyatta University Email: ISIKA.JULIET@ku.ac.ke Phone: +254 722 609495

> ³Dr. Kisato Jacqueline Department of Fashion Design and Marketing Kenyatta University Email: kisato.jacqueline@ku.ac.ke Phone: +254 724 924177

How to cite this article: Agordah, F. E., Kaindi, I. J., & Jacqueline, K. (2024). Relationship between Millinery Curriculum Content and Millinery Skills Acquired by Higher National Diploma Fashion Design Students. Journal of Education, 7(3), 47-60. https://doi.org/10.53819/81018102t5333

Abstract

Millinery art enormously contributes to the performance of Fashion Design graduates in the fashion industry. Competency-based training in Ghanaian Technical Universities demands a special focus on the various courses of study to determine the effectiveness of the skills acquired. The study's objectives were to examine millinery curriculum content used to train students in millinery art and determine the relationship between curriculum content and millinery skills acquired by HND fashion design students. The study hypothesis determined the significant relationship between the content of the millinery art curriculum and the millinery skills HND Fashion Design students acquired. Multi-stage sampling and systematic random sampling techniques were used to select five Technical Universities and students in the five regions of Ghana. Proportion random and stratified sampling were used to select 249 students from a population of 662. A total of 28 industry supervisors were purposively selected. The study adopted a cross-sectional descriptive survey to collect quantitative and qualitative data. MANOVA analysis on the hypothesis was tested at p < 0.05 alpha index, and it was rejected due to statistically significant differences between curriculum content and millinery art skills acquired. Multiple linear regression was used to determine the strength of the relationship between curriculum content

Stratford Peer Reviewed Journals and Book Publishing Journal of Education

Volume 8||Issue 1 ||Page 47-60|| October |2024| Email: info@stratfordjournals.org ISSN: 2616-8383



and millinery skills acquired. The result was accepted at R² = .301, (5, 243) =17.391, p = .535 > 0.05 with weak correlation of 30.1%. The study concludes that there is a direct relationship between the millinery curriculum content in Technical Universities and the millinery art skills acquired by Higher National Diploma Fashion Design students in Ghana, with curriculum content having a moderate effect of 30.1% on skill acquisition. The study recommends that the Fashion Design departments of the TUs review the millinery accessory curriculum using the CIPP model. It further recommends that TUs strengthen partnerships with the fashion industry to create more meaningful internship opportunities that do not financially burden students. The study suggests investing in improved instructional resources and facilities for millinery art education, including upgraded equipment and a wider range of materials. Additionally, it recommends implementing a more robust assessment system that regularly evaluates the effectiveness of the millinery curriculum in terms of skill acquisition and industry readiness. Lastly, the study advises fostering creativity and innovation in millinery design within the curriculum to better prepare students for the competitive fashion industry.

Keywords: Millinery Curriculum, Skills Acquired, Fashion Design Students

1.0 Introduction

The art of millinery involves creating unique headwear, which is essential for fashion designers in the fashion industry. According to McDowell (1992), millinery has been practised since 1890, alongside dressmaking, with a training period of three to four years, as stated by Mack (2011). In Africa, Tia (2016) traces hat-making back to 3000 B.C.E., where traditional headdresses were used for protection. The art of millinery has evolved over the years, alongside changes in clothing styles. Currently, millinery is taught in vocational and technical institutions worldwide, including Ghanaian Technical Universities. However, a gap in research regarding the benefits of millinery art skills in the fashion industry needs to be addressed. The art of millinery skills helps individuals acquire the ability to design headdresses that complement garments. These skills allow fashion design students to make a complete fashion statement by dressing their clients from head to toe (Agordah et al., 2023). When dressing accessories are poorly designed and used, they can detract from the overall style presentation. In addition, the appropriate use of dressing accessories helps make simple garments elegant. As Sharma (2024) indicated, curriculum plays a crucial role in the school system as it helps achieve expected behavioural changes by implementing its content. Society improves when a well-developed curriculum is properly implemented in schools because the knowledge and skills acquired help society to develop. Structured and innovative curriculum development has a profound impact on the knowledge and skills acquired by learners (Sharma, 2024; Sutton-Brady, 2011)

Ananga et al. (2016) conducted a study on the skills acquired by graduates of Technical Universities and identified deficiencies in meeting industrial needs. Allsop (2017) also highlighted a skill gap in fashion design education. Agordah et al. (2024) stated that the millinery art skills of fashion design students in technical universities are below average. Fashion design graduates were found to lack the necessary skills to perform effectively in the fashion industry (Agordah et al., 2023). Although these studies focused on the skills of graduates from technical universities, they did not address the skill gap in the art of millinery and the effectiveness of the millinery curriculum content as a specific area of study. Therefore, this study aims to investigate the impact of millinery

Stratford Peer Reviewed Journals and Book Publishing Journal of Education

Volume 8||Issue 1 ||Page 47-60|| October |2024| Email: info@stratfordjournals.org ISSN: 2616-8383



curriculum content on the millinery skills acquired by Higher National Diploma fashion design students. Chepchumba and Cheruiyot (2018) examined the challenges facing the fashion program in Kenya. Isika et al. (2016) also investigated the competencies of fashion design instructors in draping in Kenya, providing valuable insights into the gaps in the fashion design program. In Ghana, Obinim and Pongo (2018) and Foster and Ampong (2012) focused on developing competent skills in patternmaking. Wovenu (2017) studied the employability of fashion design students in the fashion industry and indicated that fashion graduates' skills in millinery art are below average.

This assertion by Wovenu is worrying and needs to be studied further. Practical training of fashion design students can only be achieved if the curriculum content is abreast with new trends in the fashion industry. This can be determined if the impact of the curriculum is tested on the expected behavioural changes exhibited by the learner. Therefore, this study examines the correlation between the millinery art curriculum content in technical universities and the millinery art skills acquired by the HND fashion design students. Skills in millinery art are crucial because they enable fashion designers to make complete fashion statements with their products in the industry. This helps them properly outfit their clients from head to toe. A study conducted by Agordah et al. (2023) indicated limited instructional resources in the skills transfer in millinery art in the fashion departments of the technical universities. If the fashion design departments have limited instructional resources in millinery art, how is the curriculum implemented to enable students acquire the necessary skills? Hence, this study investigates the effect of millinery curriculum content and millinery skills acquired by HND fashion design students.

1.1 Statement of the Problem

Allsop (2017) identified a skills gap in fashion design education. Chepchumba and Cheruiyot (2018) examined the challenges in fashion programs in Kenya. Isika et al. (2016) investigated the competencies of fashion design instructors in draping in Kenya. In Ghana, Obinim and Pongo (2018) and Foster and Ampong (2012) studied students' skills in pattern-making. These authors provided valuable insights into the gaps in fashion design programs. Asare et al. (2023) investigated the garment production process of informal garment manufacturers. They found that the informal fashion industry primarily trains their apprentices to mimic designs, resulting in a lack of innovative skills in their practices. Wovenu (2017) examined the employability constraints of fashion design students in the industry and found that graduates' skills in millinery art are below average. Agordah et al. (2023) studied pre-requisite skills in acquiring millinery art skills. However, none of the authors mentioned investigated the correlation between curriculum content in millinery art and the millinery skills acquired and practised by graduates in the fashion industry. To address this research gap, this study investigates the correlation between millinery curriculum content and the millinery art skills acquired by HND students in fashion design at technical universities in Ghana.

1.2 Objectives of the Study

The following objectives guided the study: -

1. Examine the millinery curriculum content used in fashion design to train HND students.



2. Determine the correlation between the curriculum content of fashion design HND students and the millinery art skills students acquired.

1.3 Hypotheses

The study was guided by the following hypotheses;

- 1. There is no significant difference between millinery art curriculum content used for millinery art skills acquisition at the Technical Universities in Ghana.
- 2. There is no significant correlation between the millinery art curriculum content and the millinery art skills acquired by the HND fashion design students.

2.0 Literature Review

The literature review was presented in sections.

2.1 Theoretical Framework

This research was based on Becker's human capital theory (1962), which was referenced by Raimi and Dada (2014) in their evaluation of the TVET program in Nigeria. Human capital theory explores the interplay between education, economic development, and societal well-being. The theory posits that investment in education and vocational training is a form of capital expenditure that should result in economic and social benefits for both the individual and society. Technical universities aim to equip students with specific skills, enabling them to become self-employed or secure employment in various industries (Ministry of Education, 2014). Although Marginson (2017) criticises human capital theory, arguing that it lacks realism by failing to explain how education can enhance human capital, it is widely acknowledged that education and training are crucial investments that foster economic and social progress, as they enhance individual capabilities and contribute to societal advancement.

2.2 Curriculum and Social Development

Curriculum and society are interdependent. This is because the curriculum is shaped by society as it reflects its past, present, and future aspirations. The curriculum influences the development of human potential and societal identity through determinations, content, and methods (Dwivedi, 2020). The Technical Universities in Ghana must train students to acquire the skills and knowledge necessary for employment. Mastering their practical skills allows them to find employment and train others for a livelihood. The training of the students also encourages the identification of pertinent issues in society and critical thinking about possible ways of solving such problems through idea development that leads to finding solutions to problems in their area of study. Dressing the head has been a significant part of African culture. According to Tia (2016), dressing the head in Africa dates back to 3000 B.C.E. when traditional headdresses were used for cultural identity and protection. The dressing is considered complete when garments are accessorised. Therefore, fashion design students must creatively present their garments with hats, fascinators, and other headdresses to make a complete fashion statement.

The curriculum in millinery art aims to help learners acquire skills, knowledge, and critical thinking to project and design new millinery products, enabling them to compete effectively in the fashion industry (Muhammad, 2019; Sutton-Brady, 2011). This helps them gain confidence and



succeed in their practices, making them responsible citizens and effective contributors to societal development. In his work in 2024, Sharma emphasises the importance of curriculum in improving teaching and learning. He suggests that this improvement is crucial for analysing the curriculum with the desired learning outcomes and learner performance. Yasa et al. (2023) similarly argue that curriculum analysis can enhance outcomes by identifying how well the curriculum goals are being met. This study aims to analyse the connection between the millinery art curriculum content and the millinery art skills acquired by fashion design students in technical universities. This analysis is essential because a society can progress only if its citizens are equipped with the necessary skills, knowledge, and critical thinking abilities to contribute to its growth responsibly.

2.2 Curriculum Content in Millinery Art

The school plays a significant role in developing the human capital needs of every nation. To achieve this, a study plan is developed to facilitate skill transfer processes. According to Ayua (2017), curriculum content is a plan of action implemented by the school to achieve expected outcomes. Every school's curriculum content is based on society's needs (Baah-Boateng, 2013). Changes in society cannot occur without the school's activities, where the curriculum plays a significant role that cannot be ignored (Kigwili & Akala, 2017). Skills acquired in school grant graduates' employment in an industry that meets society's needs and contributes to economic growth. In helping institutions deliver on their mandate, a curriculum is developed to outline what to learn (content), the training experiences (how to learn), and the expected outcome (product) (Aziz et al., 2016; Matshe & Mahiagu, 2014). A comprehensive curriculum is crucial to effective skill acquisition since it spells out the instructional resources, minimum and maximum training duration, and expected outcomes regarding behavioural changes in specific skills (Odey & Opoh, 2015). That is the only way individual learners can acquire and practice relevant skills in their chosen careers. The quality of a society is subject to the curriculum being implemented in our schools. Millinery curriculum content must clearly state specific knowledge, skills, and attitudes the learner will acquire at the various levels of study and their relevance to the fashion industry.

Educational programs must be regularly updated with industry practices to effectively prepare graduates for the workforce. To ensure high-quality education, the curriculum and its impact on students' skills must be assessed. Agordah et al. (2023) have pointed out the lack of instructional inputs in millinery art in technical universities. There is a need to investigate the relationship between the millinery curriculum and the skills HND Fashion Design students acquire to prepare them for employment in the fashion industry. The content of the curriculum directly influences the skills students acquire. If the curriculum is well-structured but faces challenges during implementation, it hinders the development of students' skills (Nnabuike et al., 2016). Poor content delivery makes it difficult for students to acquire the necessary skills, thus affecting their ability to apply these skills in the industry. Therefore, educationists need to regularly investigate the correlation between curriculum content and the knowledge/skills acquired by the learners to determine the effectiveness of the curriculum. It is only through such investigations that industry needs would be met and society would also improve economically.

This gap between education and the fashion industry needs to be addressed. Dyjur et al. (2019) suggested that academic staff should critically evaluate academic programs to ensure practical skills transfer. This evaluation is vital for understanding the correlation between the curriculum and the skills acquired. By doing so, the challenges in program implementation can be addressed



purposefully. The challenging school environment can significantly impact the acquisition of necessary skills. Factors such as limited instructional resources, outdated teaching methodologies, and a lack of emphasis on practical application can hinder students' ability to develop the skills required for employment in the industry (Agordah et al., 2023; Agordah, 2016). Additionally, inadequate infrastructure and equipment in technical universities can limit students' hands-on experience and practical training in particular areas such as millinery art. Fashion design graduates cannot make comprehensive and complete fashion statements with their products because they have not acquired a high level of skills in creating and constructing headdresses with their skills in millinery art.

Furthermore, a disconnect between the curriculum and industry practices can create a gap in students' knowledge and skills, making it challenging for them to transition smoothly into the workforce. Inadequate mentorship and guidance from academic staff can also contribute to the struggle to transfer theoretical, creative ideas into viable, practical skills for economic gain. Moreover, a lack of industry engagement, internships, and practical projects within the curriculum can further hinder students from gaining real-world experience and exposure to the demands of the fashion industry (Dyjur et al. 2019). Students may struggle to bridge the gap between academic knowledge and practical skills acquisition without relevant opportunities to apply their learning in authentic industry settings. Addressing these challenges requires a comprehensive evaluation of the academic environment, curriculum, and teaching methodologies to ensure that students receive the necessary support, resources, and practical experiences for successful integration into the industry. Donnanno (2019) indicated that implementers of the fashion curriculum need to pay attention to skills acquisition in designing and constructing dressing accessories to enable learners to compete effectively in the fashion industry.

It is imperative to investigate the correlation between the curriculum content of fashion design students and the millinery skills they acquire due to the potential impact on educational outcomes and professional development. Understanding how the fashion design curriculum aligns with the acquisition of millinery skills provides valuable insights into the effectiveness of the educational program. This investigation can help identify areas of strength and potential improvement in the curriculum, ensuring that students have the necessary skills and knowledge to succeed in the fashion design industry. Determining the correlation can also inform future curriculum development, ensuring that it remains relevant and impactful in preparing students for real-world applications in fashion design and millinery (Ayuah, 2017). Hence, this study investigates the correlation between the millinery art curriculum and the millinery art skills acquired by fashion design students with higher national diplomas in technical universities.

3.0. Research Methodology

The study employed a cross-sectional descriptive survey design to gather data from five regions in Ghana, utilizing a questionnaire and semi-structured interview guide. The questionnaire, which used a five-point Likert scale, was deemed reliable with a Cronbach's alpha score of 0.76. The research focused on 200-level Fashion Design students pursuing Higher National Diplomas at Technical Universities in Ghana, with a total population of 662. Using cluster sampling and a proportional random sampling process, 249 students were selected from five institutions across southern, middle, and northern zones. Data collection occurred from October 2021 to January 2022, with qualitative and quantitative data gathered simultaneously. The data was analyzed using



SPSS version 26, employing various statistical methods for quantitative data and thematic analysis for qualitative data. The study adhered to ethical principles and obtained necessary approvals from relevant institutions.

4.0 Findings of the Study

The findings of the study were presented in sections.

4.1 Demographic Information of Respondents

Demographic data analysis summarised the basic information of the participants. This information helps to determine whether the individuals participating in the study are a representative sample of the target population for generalisation purposes (Salkind, 2010). This study's analysis of demographic variables covered student affiliation/institution, gender distribution, and age. Table 1 shows the results from the analysis of demographic variables.

Table 1: Institution, Gender, and Age of Respondents

Variable	Responses	f	%
Institution	A	50	20.1
	В	64	25.7
	C	40	16.1
	D	65	26.1
	Е	30	12.0
Gender	Male	40	16.1
	Female	209	83.9
Age	20-22 years	63	25.3
	23-25 years	108	43.4
	26 – 28 years	55	22.1
	29 years and above	23	9.2
	No response	2	0.8

Source: Study data 2022

The table data shows that the most significant proportion of sampled students are from University D (26.1%), followed by University B (25.7%) and University A (20.1%). The smallest representation is from universities C (16.1%) and E (12.0%). Notably, 83.9% of students in the Fashion Design program at Technical Universities are female. 43.4% of students are aged 23-25, with the majority falling between 20 and 25 (25.3% of the total student population).

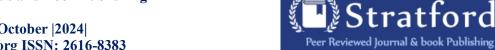


Table 2: Training Support, Used of Accessorize, Accessory type

Variable	Responses	$\overline{\mathbf{F}}$	%	
Training Support to TTUs	1-2years	3	10.7	
	3-4years	4	14.2	
	5-6years	7	25	
	7years and above	14	50	
Accessorise Garment	Yes	11	29.3	
	Not Always	7	25	
	No	10	35.7	
Type of Accessory	Beads	5	17.8	
· -	Headdresses	13	46	

Table 2 summarizes demographic data on industry supervisors of student interns and their training support to Fashion Design Departments at Technical Universities. Only 29.3% of fashion industries always accessorized garments for their clients, while 25% did not. Out of the nineteen industries that accessorized garments, 46% used headdresses. This lack of consistent industry support poses a severe challenge to acquiring millinery art skills in Fashion Design at Technical Universities.

4.2. Millinery Art Curriculum Content Used in the Technical Universities

MANOVA table 3 was used to test whether there is any variation in the content of the millinery curriculum and the millinery skills acquired in Fashion Design at the Technical Universities in Ghana.

Table 3: MANOVA Results on Millinery Art Curriculum Content in the Technical Universities

	WILKS LAMDA	F	SIG	Hyp. df	Error df
Instructional resources	.068	2.103	.000*	308	674
Curriculum Content:					
Constructing headdresses for					
facial shapes		1.860	.000	77	171
Draping and modelling of fabrics					
Manipulating fabrics to create a		4.520	.000	77	171
decorative design for finishing					
head-dresses		6.311	000	77	171
Stitching hat parts					

A one-way multiple analysis of variance was conducted to test the hypothesis. The analysis showed a statistically significant difference in skills acquired based on curriculum content available in the various universities F (308,674) = 2.103, p < .05, Wilk's lambda = .068. Therefore, the null hypothesis is rejected, and the alternate hypothesis is retained. Further analysis shows significant effects for each of the acquired skills, constructing hat for facial shapes (F (77,171) = 1.860, p < .05), draping and modelling of fabrics (F (77,171) = 4.520, p < .05), manipulating fabrics to create

Volume 8||Issue 1 ||Page 47-60|| October |2024|

Email: info@stratfordjournals.org ISSN: 2616-8383



a decorative design for finishing head-dresses (F (77,171) = 6.311, p< .05) and stitching hat parts (F (77,171) = 2.711, p< .05). In conclusion, there was a statistically significant difference between curriculum content in the Technical Universities and the millinery skills acquired by the HND Fashion Design students in millinery art, F (308,674) = 2.103, p< 0.05, Wilk's lambda = 0.068. The results of the Multivariate analysis of variance (MANOVA) show no significant difference between curriculum content in the Technical Universities and the millinery skills acquired by the HND students in millinery. This means a direct relationship exists between curriculum content and millinery skills acquired by Fashion Design students.

4.3 Millinery Curriculum Content and Ability to Construct Headdress

Multiple linear regression was used to test the moderating effect of curriculum content on HND Fashion Design students' ability to construct millinery products. The results are presented in Table 4.

Table 4: Moderating Effect of Curriculum Content on HND Fashion Design Students' Ability to Construct Millinery Products

Ability to construct	Coefficient	t-statistic	p-value	\mathbb{R}^2	Adjusted R ²	F ratio
millinery products			•		·	
Model without						_
moderating effect						
Constant	.779	.621	.535	.301	.287	20.954
Ability in draping and	.546	1.869	.063			
modeling						
Ability in decorative	1.150	3.638	*000			
manipulation of fabrics						
Ability in creative	367	-1.173	.242			
designing						
Ability in hand stitching	.005	.018	.986			
Ability in pattern	.896	3.603	*000			
drafting for soft hat						
Model with						
moderating effect						
Constant	.810	.565	.573	.301	.284	17.391
Ability in	.546	1.863	.064			
draping/blocking						
Ability in decorative	1.149	3.621	*000			
manipulation of fabrics						
Ability in creative	371	-1.138	.256			
designing						
Ability in hand stitching	.003	.010	.992			
Ability in pattern	.896	3.594	*000			
drafting for soft hat						
Interaction	.001	.045	.964			

The results in Table 4 indicate that the R2 for the model with a moderating effect presents a weak correlation of 0.301. It also shows that with the inclusion of the interaction effect of curriculum



content, the value of R^2 remained identical. However, adjusted R^2 decreased from .287 to .284, and the accuracy of this prediction also decreased, with the F-value decreasing from 20.954 to 17.391, implying a decrease in the accuracy of the prediction. This means that the independent variables explain 30.1% of the variability of the dependent variable. However, the accuracy of the data was found to be 28.4%. The overall regression was statistically insignificant R^2 = .301, F (5, 243) =17.391, p = .535 > 0.05. Therefore, the study accepts the hypothesis. However, the study result indicated a weak moderating effect of curriculum content on students' ability to construct millinery products (dependent variable). Furthermore, the ability to decoratively manipulate fabrics (0.000) and draft patterns for soft hats (0.000) was significant. The qualitative data from the views expressed by fashion industry participants supported these findings.

Typical comments included the following: -

[Students have] ...difficulty in hand stitching; they always want to glue. They find it quite difficult doing hand stitches (industry contact or participant 10)

The students lack millinery skills. ... They don't have enough skills in blocking/draping most of the materials. Lack of efficient skills in fabric manipulation. I do my best under the circumstances (industry contact or participant 5)

Students must acquire millinery skills, including hand stitching neatly with little or no trace. This is important, but I observed that many students struggle with it. The training must be strengthened in this area (industry contact or participant).

The comments showed that fashion industry members doubted that fashion design students from Ghanaian technical universities possessed the needed millinery arts skills. The industrial attachment component supporting the acquisition of millinery skills among Fashion Design students was deficient for two principal reasons, as communicated in the following comments.

I accepted her internship in my shop intending to learn millinery from her, but she could not teach me; the millinery aspect of her collection was bought from a milliner opposite my shop (industry supervisors 28.5%, 8)

I do not take students on attachment or internships for free. ... I charge them for the millinery skills, and they learn many skills in millinery within the 8 weeks. ... (Industry supervisor 21%, 6).

From the comments, some industry members were expecting to learn millinery skills from student interns and were disappointed. Industry members who could help students acquire the skills were charging students for their services. This did not depart from the observations the researcher made in the field. During the data collection, it was observed that some fashion industries where the students had their internship do not accessorize their garments with millinery items. More so, the fashion industry, where the students can practice the millinery art skills they acquired, was demanding money before accepting the students for internship.





4.4 Discussion on the Correlation between Millinery Curriculum Content and Millinery Art Skills Acquired by HND Fashion Design Students.

The study results showed that the curriculum content in technical universities varies. The MANOVA analysis indicated a statistically significant difference in acquired skills based on the curriculum content across the universities (p < .05, Wilk's lambda = .068). As a result, the null hypothesis is rejected, and the alternate hypothesis is accepted. Upon further analysis, there are significant effects for each of the acquired skills: constructing hats for facial shapes (F (77,171) = 1.860, p < .05), draping and modelling of fabrics (F (77,171) = 4.520, p < .05), manipulating fabrics to create a decorative design for finishing head-dresses (F (77,171) = 6.311, p < .05), and stitching hat parts (F (77,171) = 2.711, p < .05). The discovery shows a clear connection between the millinery curriculum taught in educational institutions and the proficiency in millinery skills developed by Fashion Design students. If technical universities regularly update the millinery curriculum to align with industry practices, fashion design students will be well-prepared with the necessary millinery skills to work effectively in the Ghanaian fashion industry (Agordah, 2016).

The results of the multiple linear regression analysis showed that the moderating effect of curriculum content on HND Fashion Design students' ability to construct millinery products was not statistically significant (R2 = .301, F (5, 243) = 17.391, p = .535 > 0.05), as indicated in table 4.4. This suggests that the curriculum content has a weak moderating effect of 30.1% on the ability to construct millinery products. Among the different curriculum content areas, only decorative fabric manipulation was statistically significant at p = 0.00, while draping/blocking, design creation, hand stitching, and pattern drafting for soft hats were not statistically significant. Dyjur et al. (2019) argue that a well-planned curriculum, fully implemented with necessary resources, has a positive impact on learners' acquisition of knowledge and skills. This indicates that there may be challenges in implementing the millinery curriculum or by the implementers. According to Kigwili and Akala (2017), a well-planned curriculum can only achieve its objectives if it is delivered explicitly by competent personnel. The study also revealed that industrial internships in the fashion industry were not very helpful. This is because some industry members demanded fees for these internships, which poses a challenge to students interested in acquiring millinery art skills. These are serious issues that technical universities must address to support students in acquiring millinery art skills.

5.0 Conclusion

The study concludes that there is a direct relationship between the millinery curriculum content in Technical Universities and the millinery art skills acquired by Higher National Diploma (HND) Fashion Design students in Ghana. The analysis revealed statistically significant differences in acquired skills based on curriculum content across universities, with significant effects observed for skills such as constructing hats for facial shapes, draping and modeling fabrics, manipulating fabrics for decorative designs, and stitching hat parts. This finding underscores the crucial role that a well-structured and regularly updated curriculum plays in preparing students with the necessary millinery skills for the fashion industry. However, the study also found that the moderating effect of curriculum content on students' ability to construct millinery products was relatively weak, explaining only 30.1% of the variability in skill acquisition. This suggests that while curriculum content is important, other factors may also influence the development of millinery skills among fashion design students.



Furthermore, the study highlighted challenges in the implementation of the millinery curriculum and the acquisition of practical skills. Industrial internships, which are meant to provide hands-on experience, were found to be less effective than expected, with some industry members charging fees for these opportunities. This poses a significant barrier for students seeking to acquire and refine their millinery art skills in real-world settings. The research also revealed that some fashion industries where students completed internships did not regularly incorporate millinery items in their garment production, limiting students' exposure to this crucial aspect of fashion design. These findings indicate a gap between the theoretical knowledge provided by the curriculum and the practical application of millinery skills in the industry, suggesting a need for closer alignment between academic training and industry practices.

6.0 Recommendations

The study recommends that Heads of Departments of Fashion Design in various Technical Universities (TUs) conduct a comprehensive audit and review of their millinery accessory curriculum to ensure it aligns with current trends and meets the needs of the fashion industry. This review should focus on strengthening the practical components of the curriculum, particularly in areas where students have shown weaknesses, such as hand stitching and fabric manipulation for millinery purposes. Additionally, TUs should work on establishing stronger partnerships with the fashion industry to create more meaningful internship opportunities that do not financially burden students. These partnerships could include collaborative projects, guest lectures from industry professionals, and industry-sponsored workshops to bridge the gap between academic learning and practical application.

The study also recommends that TUs invest in improving their instructional resources and facilities for millinery art education. This could involve upgrading equipment, providing a wider range of materials for students to work with, and ensuring that teaching staff are up to date with the latest techniques and technologies used in the millinery industry. Furthermore, the curriculum should be designed to foster creativity and innovation in millinery design, encouraging students to develop unique styles and approaches that can set them apart in the competitive fashion industry. Lastly, TUs should consider implementing a more robust assessment system that regularly evaluates the effectiveness of the millinery curriculum in terms of skill acquisition and industry readiness. This could include seeking feedback from industry partners, tracking graduate employment outcomes, and continuously adapting the curriculum based on these insights to ensure that fashion design education remains relevant and impactful in preparing students for successful careers in millinery and fashion design.

REFERENCES

Agordah, F. E., Jacqueline, K. & Kaindi, I. J. (2023). Prerequisites for Millinery Art Skills Acquisition by Higher National Diploma Fashion Design Students in Ghana. *East African Journal of Arts and Social Sciences*, 6(2), 101-113. https://doi.org/10.37284/eajass.6.2.1411.

Allsop, D. (2017). *Examining the skill gap in fashion education*. Master's thesis submitted to the University of Huddersfield. http://eprints.hud.ac.uk/id/eprint/32664/



- Ananga, D. E, Adzahlie-Mensah, V. & Tamanja, E. (2016). Higher education and employability in Ghana. In Universities, Employability and Inclusive Development: Repositioning Higher Education in Ghana, Kenya, Nigeria and South Africa. British Council pp. 77-90.
- Asare, Thomas, Nyarko, Michael, Fobiri, George, & Marfo Ayesu, Solomon. (2023). Design Development Gaps in Apprenticeship-Trained Garment Producers in Ghana.
- Ayuah, G., A. (2017). Effective teaching strategies: Orientation and refresher workshop for teachers. Doi 10.13140/RG2.2.3414.09765
- Aziz, S., Mahmood, M. & Rehman, Z. (2018). Implementation of CIPP Model for Quality Evaluation at School Level: A Case Study. *Journal of Education and Educational Development*. https://files.eric.ed.gov/fulltext/EJ1180614.
- Baah-Boateng, W. (2013). Human capital development: The case of education as a vehicle for Africa's economic transformation. *Legon Journal of International Affairs and Diplomacy* (LEJIAD) Vol. 7(1). Pp 31-55
- Burns, A., C. & Bush, R., F. (2010). Marketing research (6th Edition) Prentice Hall.
- Chepchumba, R. M. & Cheruiyot, M. (2018). Challenges facing Kenyan University Fashion and Apparel Design Programs. *Scholars Journal of Economics, Business and Management (SJEBM) Vol.* 5 (5). Pp. 344-353
- Donnanno, A. (2019). Fashion Patternmaking Techniques for Accessories: Shoes, Bags, Hats, Gloves, Ties, Buttons, and Dog Clothing. https://www.amazon.com/Fashion-Patternmaking-Techniques-Accessories-Clothing/dp/8416851611
- Dwivedi, S. K. (2020). Education and Society. *ResearchGate*. https://www.researchgate.net/publication/345162189_Education_and_Society
- Dyjur, P., Grant, K., & Kalu, F. (2019). Curriculum review: Action plans and reports. Taylor Institute for Teaching and Learning. Calgary: University of Calgary.
- Forster, P. & Ampong, I. (2012). Pattern cutting skills in small-scale garment industry and teacher education universities in Ghana. *International Journal of Vocational Education*. Vol. 4 (2), pp. 14-24
- Fox, N., Hunn, A., & Mathers, N. (2007). Sampling and sample size calculation. The NHIR RDS for the East Midlands/Yorkshire & the Humber.
- Isika, K, I., Mburugu, K., Nguku, E., & Obere, A. (2016). The Competencies of Fashion Design Teachers in Public Institutions of Higher Learning in Nairobi County, Kenya. *International Journal of Sciences: Basic and Applied Research (IJSBAR) http://gssrr.org/index.php?jpurnal=Journal*
- Kigwili, P., C. & Akala, W., J. (2017). Resource Utilisation and Curriculum Implementation in Community Colleges in Kenya. *International Journal for Research in Vocational Education and Training (IJRVET) Vol.* 4(4) https://www.econstor.eu/bitstream/ DOI: 10.13152/IJRVET.4.4.4
- Mack, S. R. (2011). Gifts to be Cultivated: Training in Dressmaking and Millinery 1860-1920. (Doctoral Dissertations University St. Thomas, Minnesota UST). https://ir.stthomas.edu/caps_ed_lead_docdiss



- Marginson, S. (2017). Limitations of human capital theory. *Journal of Studies in Higher Education*. *Vol.* 44(2) tandfonline.com/doi/full/
- Matshe, P., F., A. & Mahiangu, V., P. (2014). Realigning the curriculum for the societal needs in the 21st century. *Mediterranean Journal of Social Sciences (MCSER) Vol.* 5(7) pp 291-297. DOI 10.5901/mjss. 2014.v5n27p291 researchgate.net/publications
- Ministry of Education (2014) The Polytechnic Law 1992 PNDC Law 321 Accra Ghana
- Muhammad, Y. (2019). Choosing an appropriate teaching methodology. https://www.researchgate.net/publication/
- Nnabuike, E., K.; Aneke, M., C.; Otegbulu, R., I. (2016). Curriculum Implementation and the Teacher: Issues, Challenges and the Way Forward. *International Journal in Commerce, IT & Social Sciences. Vol.* 3(6) https://www.academia.edu/
- Obinim, E. & Pongo, N., A. (2018). Competency Training Models and Teaching of Apparel Patternmaking in Ghana. *International Journal of Vocational Education and Training. Vol.* 14 (2) pp. 48-57
- Odey, E., O. & Opoh. F., A. (2015). Teachers Perceived Problems of Curriculum Implementation in Tertiary Institutions in Cross River State of Nigeria. *Journal of Education and Practice*. *Vol.* 6(19) https://files.eric.ed.gov/fulltext/EJ1079530
- Omair, A. (2016). Selecting the appropriate study design for your research: Descriptive study designs. *Journal of Health Specialties Vol.* (3) 3. Pp. 153-156 http://www.thejhs.org
- Raimi, L. & Dada, J. O. (2014). Impact of quality assurance on technical vocational education and training in Nigeria. *Afro Asian Journal of Social Sciences. Vol.* (5)5 http://www.onlineresearchjournals.com/aajoss/art/140.pdf
- Salkind, N. J. (2010). Demographics. Encyclopaedia of Research Design. SAGE
- Santos, J., L., G, Erdmann, A., L. Meirelles, B., H. Lanzoni, G., M., M., L. Cunha, V., P. Ross, R., R. (2017). Integrating Quantitative and Qualitative Data in Mixed Methods Research. http://dx.doi.org/10.1590/0104-07072017001590016
- Sharma, N. (2024). The Importance of Curriculum Development in Enhancing Teaching and Learning https://www.hurix.com/the-importance-of-curriculum-development-in-enhancing-teaching-and-learning/.
- Sutton-Brady, C. (2011). Innovating Through Structured Curriculum Development. Journal of College Teaching & Learning (TLC). 6. 10.19030/talc. v6i1.1175.
- Tambwe, M., A. (2017). Challenges facing implementation of Competency-Based Education and Training (CBET) system in Tanzanian Technical Institutions. *Education Research Journal Vol.* 7(11) pp 277 283 https://www.researchgate.net/publication/
- Wongnaa, C., A. & Boaxhie, W., K. (2018). Perception and adoption of competency-based training by academics in Ghana. *International Journal of Education, Vol.*5 (52), Pp 1-13. STEM https://www.researchgate.net/publication/doi.org/10.1186/s40594-018-0148-
- Wovenu, M. (2017). Some underlying reasons accounting for fashion graduates of the polytechnics not operating in the fashion industry. *Arts and Design Studies Vol.*53. pp. 28-32 www.iiste.org
- Yasa, I., Widiana, I. & Ratnaya, I. (2023). Analysis of Curriculum Policy on the Performance of Early Childhood Education Teachers. Journal of Social Science. 4. 1205-1216. 10.46799/js. v4i5.699.