

The Evaluation and Factors Related to Learning of Kenyan University Undergraduate Fashion and Apparel Design Programs

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Abstract: Through evaluation of an educational program, implementers are able to tell whether the desired outcomes are achieved. In addition other factors such as curriculum, availability of learning materials and equipment, exposure to target industries and information technology come into play in determining the success of an educational program. Globally, most countries rely on Fashion and apparel design (FAD) educational training programs for the supply of skilled manpower for their fashion and apparel industries (FA). This skilled manpower for FA industries is highly required for the success of trade in African countries, Kenya included. This paper therefore determined the evaluation and factors related to the Kenyan university undergraduate fashion and apparel design programs (UUGFADPs) in skill training for the FA industries. Data was collected through a survey study among 99 university undergraduate fashion and apparel design students (UUFADSs) in five Kenyan universities and 54 university fashion and apparel design graduates (UFADGs) of these universities. This paper will present views of the respondents concerning the evaluation and factors related to learning of the university fashion and apparel design (UFAD) courses in these institutions.

Keywords: Evaluation, Fashion and Apparel Design Programs, Learning Materials and Equipment, Referencing Materials, Information Technology, Fashion and Apparel Industries

I. Introduction

An education program constitutes: a mission statement; goals and objectives; learning outcomes; a curriculum; program assessment or evaluation; teaching methods; learning activities; constituents and continuous improvement. All these aspects of an education program must be clearly related to the purpose of the institution.

Mbae [1] asserts that all our practices at the universities needed to be constantly questioned, reviewed and justified. If such a review reveals the practice to be sound and justified, it should be maintained and strengthened but, if the practice turns out to be outdated, ineffective or unjustified, it should be modified or thrown out to be replaced with a better one. As proposed by Mbae's study that educational programs need to be questioned, reviewed and justified, this study sought to review relevance of the Kenyan UUGFADPs.

Propelled to make the apparel industry attractive in worldwide trade, India, the United States (US), Australia, South Africa and Thailand decided to invest in their local fashion education and exposure [2, 3]. Otiso [4] points out Sufficient numbers of high-skilled workers are needed to spearhead apparel design, equipment maintenance and production and marketing in the FTA industry. Such high-skilled workers are lacking in most African countries, Kenya included [4, 5]. Going by the above studies, university fashion training programs have contributed to supply of manpower which enhanced competitiveness in world apparel trade in Asian countries. The studies further imply that most African countries lack high-skilled workers in apparel design. Little is known on concerning the effectiveness of the Kenyan university undergraduate fashion and apparel design programs (UUGFADPs). This paper will discuss the evaluation and factors related to learning of UUGFADPs.

1.1 Program Assessment/Evaluation

According to Hounsell [6], program assessment or evaluation is defined as the process of using quantitative measurements to determine if students are accomplishing the desired learning objectives: it is about students learning in order to describe what they know, are able to do and also working toward. Evaluation describes a variety of ideas and methods for gathering evidence of student performance. These ideas and methods provide examples of criteria for assessing the extent to which the prescribed learning outcomes have been met. From the evidence and information collected in the evaluations, instructors describe students' learning performance. This information is used to provide students and staff with ongoing feedback, plan further instructional and learning activities, set subsequent learning goals and determines areas for further instruction and intervention. The evaluation of student performance is based on a wide variety of methods and tools, ranging from portfolio assessment, project assessment and practicum assessment to pencil-and-paper tests.

Results from assessments should also be used in the development and revision of the curriculum and provide information about teaching and learning. Measurements may take the form of surveys, quantitative interviews, industrial feedback, students' portfolios, external exam results and external reviews. There should be evidence that the measurements are not merely self-serving, but are useful for the purpose of program improvement. This usually requires separating the roles of an evaluator from that of an instructor.

Mbae [1] recommends constant review of university educational programs and one way to ensure this is through such feedback from the industry, course evaluation and review of students' grades. He noted that evaluation is not something done at the end of the teaching-learning process but should be part and parcel of that process. He suggested that practices used to measure and evaluate learning in Kenyan public universities be reviewed. For instance, he questions the justification for appointing external examiners to moderate examination hence maintain high standards, yet some issues, such as lack of qualified personnel and inadequate supply of teaching materials, are left unchecked. Continuous assessment should be more meaningful and reveal trend of performance by pointing out strengths and weaknesses in the learning process.

Mbae [1] therefore recommends that each university should set up its own university standards committee that operate at faculty level and consisting of senior scholars from all teaching departments of the faculty. In some cases, these scholars may be sourced from other universities. The role of the committee would be to study faculty programs, evaluate each regularly on the basis of relevance of the curriculum, quality of teaching, moderation of examination and in turn advice the faculty members. In view of Mbae's recommendation, this paper sought to determine information regarding program evaluation employed in the UUGFADPs in skill training for the FA industry.

1.2 Factors Related to Learning of FAD

While discussing the United Kingdom's (UK) higher education and apparel industry, Challis, Sayer and Wilson [7] points out that technology has brought new changes in design forcing a conceptual shift in apparel design and creation hence challenging educators to re-evaluate fashion and apparel programs. Skill fast UK [8] notes that higher education courses lacked depth development in the technical competency required to enable companies compete in the global fashion markets. Yang, You and Chen's [9] study on competencies for industrial designers in the UK noted that design education needed to be reviewed and updated in order to keep abreast of technological advances. Focusing on the fashion design programs in the United States US, Feather [10] notes that higher education needed to critically evaluate the course offerings and make necessary changes in the curricula to strengthen the position of fashion design programs and thus keep them viable. The above studies suggest that due to change in technology, there is need to evaluate the educational programs, both in content and delivery. The changing technology in the developed countries requires that the educational programs had to be responsive to the needs of industry for them to compete in global fashion markets. The information on relevance of UUGFADPs' learning to the FA industry as well as challenges that should be overcome to ensure this relevance to FA industry manpower needs have hardly been established in Kenya hence this paper sought to provide this knowledge by investigating on adequacy of factors related to learning of Kenyan UUGFADPs.

Focusing on Kenyan higher education, Gigolo [11] points out that it was important to develop sound criteria for assessing quality in education by taking into account observable input such as learning resources, time, equipment, teaching methods and quality assurance mechanism among other parameters. The certificate holders from these educational institutions would therefore be competent both locally and internationally. Muigai et al. [12] indicate that, in light of the costly university education, the scarcity of resources and the need to accommodate an increasing number of school leavers, universities in Kenya have been left with little resources to invest in new programs and technology. Hence, some of the curricula have been criticized to be out of tune with current technology.

II. Materials And Methods

This study employed a descriptive survey research design to investigate into the evaluation and factors related to learning of Kenyan UUGFADPs. The study was carried out at Kenyatta, Maseno and Egerton Universities, University of Eldoret (UoE) and University of Eastern Africa-Baraton (UEAB) where the fashion and apparel design programs were offered and had their degree graduates working in the FA industry. The study was also conducted at apparel design firms that have employed Kenyan university fashion and apparel design graduates across Kenya. These firms included business establishments that take care of all aspects of apparel: from designing garments and selling finished products to the retail trade. These were graduates who were employed in fashion designing, pattern making, garment assembly, quality control, fashion merchandising and retailing in Kenya. The graduates who responded to this study were from FAD firms/industries that were located in Kisumu, Nakuru, Mombasa, Eldoret, Athi River and Nairobi cities. The firms included: RIVATEX East Africa Ltd. in Eldoret and EPZ- ALLTEX Ltd. in Athi River. Buni Ltd., Crown Rockshield, Johari Fashions,

Enkele Designs Ltd., Kenya Girl Guide Association, Blue omnibus, Kooro Fashions, Vera Beauty College, Kiko Romeo, Va Bene Fashions, Manchester Outfitters and The National Museums of Kenya were located in Nairobi. APPTec fashion Consultants, ALIVE Design House and AYTSOBEI Fashions were in Nakuru. TITI-my style was in Kisumu and EPZ- KAPRIC Apparels Ltd. was located in Mombasa.

The study sought information from the Kenyan university fashion and apparel design undergraduate students (UUFADs) as well as university fashion and apparel design graduates (UFADGs) who had graduated within the last five years from the time of data collection. Ninety nine (99) UUFADs in the selected 5 university fashion and apparel design (UFAD) departments were selected purposively and were all able to respond to the questionnaires. The criteria for selecting the students was based on the level of study, hence the students were all the 3rd and 4th year students. These students had advanced in their training and had been exposed to the FA industry through industrial attachment. It is also at the undergraduate level that most of the practical skills in fashion/apparel design are imparted to students. It is therefore believed that the students were in a better position to give information regarding the UUGFADPs and the FA industry. The number of respondents from the universities (UUFADs) was therefore 99.

Fifty four (54) UFADGs were selected through snowball sampling. The first group of graduates that were known to the researcher was selected and this group then identified others who were known to them. The total number of graduates that were included in the sample were determined after reaching saturation point and hence respondents from the FA industry totalled to 54. The total sample size for UUFADs and UFADGs was therefore 153 respondents.

2.1 Data Collection Methods

Structured and unstructured self-administered questionnaires were distributed by the researcher to UUFADs and UFADGs. The administration of the questionnaires was done manually and by electronic mail.

When the respondents were not able to fill in the questionnaires, the researcher used their questionnaires as interview guides to interview them through telephone while recording their responses. Information on the overall evaluation of the entire program for each university was established through interviews with the UFAD heads of departments (HODs). Document review of UUFADs' Course outlines as well as participant observation was also done to gather information on evaluation of UUGFAD courses.

2.2 Data Analysis and Presentation

Qualitative and quantitative data deduced from the study were analyzed. Qualitative data was coded according to emerging patterns and then categorized and explained under themes. Quantitative data was statistically analyzed using the statistical package for social sciences (SPSS). Descriptive statistics, namely frequencies and percentages, were used to describe and summarize data. The results were presented in form of tables, plates and pie chart.

III. Results And Discussion

3.1 Evaluation of UUGFADPs

Interviews with UFAD HODs found that evaluation of FAD programs was done by all the university FAD departments ranging from internal moderation, external moderation (examiners) and Directorate of Quality Assurance. Performance standards were evaluated through ISO (International Organization for Standardization) tools, students' evaluations and external evaluations.

During field observation, it was noted that course evaluation of practical courses was done either by the lectures or technician as the students did their practicals. Final products for practical lessons included folders with samples of seams, pockets, collars, drafted patterns and dresses made from muslin, skirts, blouses, shirts, trousers, jewellery, sketches, one piece dress and African cultural dresses. At the end of the semester, before beginning exams, the end products were marked and kept to be marked again by the external examiners then returned back to students later. During the period of observation at UEAB, UoE and Egerton University, displays of the students' projects were done or students wore and did a fashion show of their designs as the lecturer marked. During the show, other members of the department were invited. Plate 1 illustrates an exhibition of students' projects for Multimedia class at Egerton University.



Plate 1: An Exhibition of Multimedia Projects at Egerton University

Plates 2 shows a student from Kenyatta University wearing their designed costume during an evaluation while plates 3 and 4 illustrates UoE students modelling their projects in a fashion show organized at the end of the semester..



Plate 2: A Show of Performance Costume by a Student at Kenyatta University



Plate 3: A Student Showing her Designed Maasai Attire



Plate 4: Students of UoE in a Cat Walk of Cultural Dress

At UEAB FAD department, students' practical projects were never checked by an external examiner; they were given back to the students once they had been marked. This implies that the evaluation of the standards for the practical area, which is crucial to acquisition of FAD skills, was not assessed by the external examiner in this department.

The results from document review of course outlines noted that evaluation for theory lessons was mostly done by written continuous assessment tests (CATs), term papers and final written exams. Table 1 presents mark allocation for FAD theory courses as per the UFAD departments.

Table 1: Mark Allocation for FAD Theory Courses as per the UFAD Departments

UFAD Department	CATs	Written Exam
KU	30	70
UoE	30	70
Maseno	30	70
Egerton	30	70
UEAB	50	50

CATs, in all the UFAD departments except UEAB's, carried 30 marks and the end of semester written exams carried 70 marks. UEAB CATs and written exam each contributed 50 percent to the course mark. Table 2 presents mark allocation for FAD practical courses as per the UFAD departments.

Table 2: Mark Allocation for FAD Practical Courses as per the UFAD Departments

UFAD Department	Practicals	Written Exam
KU	30	70
UoE	40	60
Maseno	50	50
Egerton	40	60
UEAB	Determined by lecturer	Determined by lecturer

From Table 2, Maseno had 50 marks for written exam and 50 marks for practicals, UoE and Egerton 40 marks for practicals and 60 marks for written exam while KU had 30 marks for practicals and 70 marks for written exam.

Some courses at UoE, Maseno and Egerton Universities were 100% practical work. Other modes of evaluation included term papers, class presentations, group work for theory courses and field reports and students' projects for practical courses.

This study noted that some UUFADSs had complaints concerning UFAD course mark allocation; that sometimes courses that were too demanding practically were allocated lower marks while the theory part of the lesson was allocated higher marks which led to demoralizing learners. The UUFADSs further recommended that during evaluation, practical part of a course should be allocated more marks than the theory part. The evaluation of students' performance during industrial attachment was done by supervisors at the places of attachment and

university assessors; the lecturers would occasionally visit the industrial attachment stations and assess the FAD students' progress.

This study argued that ascertaining teaching/learning through moderation of examination scripts by an external examiner was not an adequate way of evaluating practical courses such as FAD. Written exams only ascertained the knowledge and not practical skills of a learner. This observation concurs with Mbae's [1] who questions the justification for appointing external examiners to moderate examination as a way of maintaining high standards, yet some issues such as lack of qualified personnel and inadequate supply of teaching materials were left unchecked at Kenyan universities. The evaluation of FAD courses would be more effective when done practically and continuously throughout the learning process.

3.2 Other Factors Related to Learning of FAD

The UUFADSs and UFADGs were asked to rate the adequacy of availability of learning materials and equipment, referencing materials, use of IT, and visits to FA industries. The adequacy of these factors was further ascertained by responses from interviews with the UFAD HODs, observation checklists and document analysis. The knowledge of adequacy of these factors related to learning in the UUGFADPs could give an implication on quality in delivery of the UFAD programs. Categories available for responses included: above average, average and below average. Scores were assigned to the categories as 3, 2 and 1 respectively. An adequacy rating index was then derived using the formula related to that of frequency index previously derived:

$$\text{Adequacy index of Learning Factors} = \frac{\text{Total Score} \times \text{frequency \%}}{100}$$

Example from table 3: For use of IT, Total score = $\frac{(1 \times 3)}{100} + \frac{20 \times 2}{100} + \frac{79 \times 1}{100} =$

$$0.03 + 0.4 + 0.79 = 1.22$$

The category with the highest rating index indicated the highest rated factor related to learning and hence the most adequate in the UUGFADPs as perceived by the UUFADSs. The maximum index that could be derived for each factor related to learning was 3.

The students' responses on the given factors related to learning were as shown in Table 3 below.

Table 3: UUFADSs' Rating on the Given Factors Related to Learning (N=99)

Factor Related to Learning	A Avg SC=3		Avg SC=2		Bw Avg SC=1		ADQCY Index
	F	%	F	%	F	%	
Courses learnt	20	20	73	74	6	6	2.14
Competence of instructors	22	22	62	63	15	15	2.07
Referencing materials	2	2	50	50	48	48	1.54
Learning materials & eqpmnt	7	7	36	36	56	57	1.5
Visits to industry	0	0	73	74	6	6	1.27
Use of IT	1	1	20	20	78	79	1.22

Key:

A Avg SC –Above average score; **Avg SC** – Average score; **Bw Avg SC** –Below average score; **ADQCY** – Adequacy; **Eqpmnt** -Equipment

Most of the students (56, 57%) rated learning materials and equipment as below average while only 7 students (7%) rated the factor as above average. The use of IT was rated as below average by 78 students (79%) and above average by only one student (1%). The derived adequacy indices are shown in Table 3 and Figure 1.

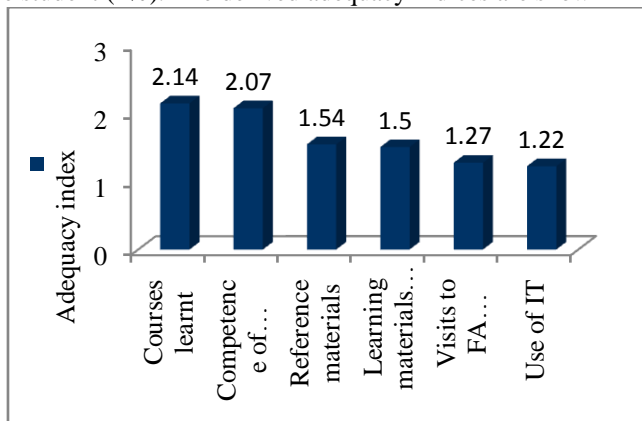


Figure 1: Rating of Factors Related to Learning as Perceived by UUFADSs

The highest rated factor related to learning was the courses learnt by the UUFADSs with 2.14 and the lowest rated factor was the use of IT (1.22). Visits to industry (1.27), learning materials and equipment (1.5) and adequacy of referencing materials (1.54) were also rated low indicating that these factors were poorly delivered or practiced as perceived by the UUFADSs.

Given that the UFADGs had experienced working in the FA industry, their rating of the adequacy of the given factors related to learning in the UUGFADPs can reflect the quality of delivery of the UFAD programs especially with regard to the programs' relevance to the FA industry. The factors included: learning materials and equipment, referencing materials, use of IT, visits to FA industries, the competence of instructors and courses learnt at the university.

Table 4 presents the UFADGs' rating of factors related to learning FAD.

Table 4: UFADGs' Rating on the Given Factors Related to Learning (N=54)

Factor Related to Learning	A Avg SC=3		Avg SC=2		Bw Avg SC=1		ADQCY Index
	F	%	F	%	f	%	
Courses learnt	15	28	37	68	2	4	2.42
Competence of instructors	22	41	32	59	0	0	2.4
Learning materials & eqpmnt	4	7	28	52	22	41	1.66
Referencing materials	2	4	24	44	28	52	1.52
Visits to industry	1	2	13	24	40	74	1.28
Use of IT	0	0	7	13	47	87	1.03

Key: A Avg SC –Above average score; Avg SC – Average score; Blw Avg SC – Below average score; ADQCY –Adequacy; Eqpmnt - Equipment

From the table, the majority (28, 52%) of UFADGs said that the adequacy of learning materials and equipment was average. Twenty two (41%) indicated that the learning materials and equipment were below average and 4 (7%) answered that the learning materials and equipment were above average. Referencing materials were rated below average (28, 52%) by a majority, average by 24 (44%) and above average by 2 (4%) of the UFAD graduates. Use of IT, such as CAD, internet and projectors, in learning was rated below average by a majority (47, 87%) and average by 13 (24%). Visits to fashion and apparel industry was below average according to 40 (74%) of the UFADGs and average according to 13 (24%) of the graduates. Thirty two (59%) of the UFADGs felt that competence of the instructors was average while 22 (41%) rated this factor as above average. Concerning the courses learnt or the contents in the curriculum, a majority (37, 68%) of the UFADGs felt that the courses or contents in the UFAD curriculum were average while 15 (28% rated the FAD courses as above average.

An adequacy index was derived using the formula that was used in the case of UUFADSs and UFADS. The derived rating indices are also shown in Table 4.

Figure 2 below shows the adequacy indices of the factors related to learning as rated by the UFADGs.

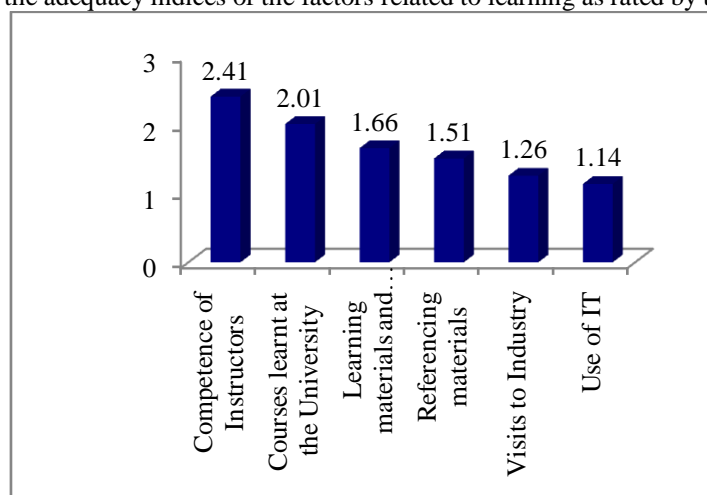


Figure 2: Rating of Factors Related to Learning as Perceived by UFADGs (N=54)

The results in Figure 2 shows that the highest rated factor related to learning by UFADGs was the courses learnt by the UFADGs with 2.42 and the lowest rated factor was the use of IT (1.03). Visits to industry (1.28), learning materials and equipment (1.66) and adequacy of referencing materials (1.52) were also rated low indicating that these factors were poorly delivered or practiced as perceived by the UFADGs.

The rating of all the factors related to learning by the UUFADSs and UFADGs was generally low, indicating that these factors were poorly delivered or practiced as perceived by the 3 categories of respondents.

The use of IT and visits to industry were rated the lowest, implying that the respondents perceived that there is still a lag in technology in learning of FAD at Kenyan universities as demonstrated by the low adequacy index of IT. This observation agrees with Muigai et al. [12] who indicate that, Kenyan university curricula have been criticized as out of tune with current technology.

The low rating of the factors related to learning further implies that learning materials, equipment and references were not sufficient in the university FAD training process. This agrees with Edwinsson and Nilson's [13] who observed that Kenyan fashion design schools did not give students appropriate tools to develop within the fashion industry; they urged Kenyan universities and fashion design schools to improve on the available equipment in order for competence level of local fashion designers and brands to increase. The findings also concur with Kurz's [14] on Swedish fashion design schools who found that the teaching materials were not adequate in the design schools. Availability of relevant learning materials and equipment was therefore poor and yet crucial for successful skill training by the UUGFADPs.

3.3 Other Factors Related to Learning that were Observed / Reviewed

From the field observation, most sewing machines were not in good condition in UoE and Maseno University UFAD departments. The sewing machines were mostly old and treadle except for KU that had several current electric machines. Plate 5 shows a student in a pattern drafting class stitching with a sewing machine.



Plate 5: A Student Stitching With a Sewing Machine during a Pattern Drafting Class at Maseno University

KU FAD department had its own computer lab, 4 of the UFAD departments did not have hence relied on the university computer departments during their computer lessons. The computers in the other 4 universities' labs were old and outdated without relevant and latest CAD/CAM software for FAD.

The labs were spacious as the number of students was very few at UoE, UEAB and Maseno universities' FAD departments. One case of a lecture room at the UoE where some UFAD lessons were offered was congested with many chairs due to the fact that a larger class of a different program held a theory lesson in the room previously.

Teaching/learning aids mostly used in some theory lessons were pictures from magazines, charts and samples of clothing construction and written handouts. One lesson had a lecturer using her computer to teach and illustrate concepts. There were no audiovisual aids, e.g. projectors, in any of the observed lessons. The implication of this finding is that the use of ICT (information communication technology) was hardly employed in the UUGFADPs. This observation agrees with Muigai et al. [12] who indicate that some of the Kenyan university programs were out of tune with current technology. Yang et al. [9] note that design education needed to be reviewed and updated in order to keep abreast of technological advances. The delivery of UUGFADPs was not in tune with modern technology an attribute that may interfere with their relevance to the needs of the FA industry in the 21st century.

From the document review of UFAD departments' time tables, the number of hours allocated per course was observed. For the case of KU, Egerton, Maseno Universities and UoE, all theory courses were allocated 3 hours per week, of which, sometimes, they were distributed throughout the week or merged as a 3-hour block. In the case of practical lessons, 5 hours were allocated; 2 hours for theory part and 3 hours for practicals. In 3 of the universities, some courses were 100% fieldwork/ practical hence the 5 hours were for practicals/fieldwork only. UEAB had all courses taking 4 hours and the distribution of the hours to practicals and theory depended on the course and the lecturer.

In 4 (25%) of the observed courses, like Principles of Clothing Construction, students never managed to complete their projects by the end of semester either because the time was less or the workload or number of courses done during the semester were too many. This implies that sometimes the UUGFADPs may fail to

complete their course projects either because of less time allocated for the course, heavy workload or too many courses during the semester or few learning/ teaching materials/ equipment. This observation agrees with Digolo [11] who asserts that among the challenges facing the Kenyan education in the 21st century is quality which was assessed from observable input and time was one of them. Time for UFAD courses was therefore inadequate in some cases and this questions the quality of the students' practical projects.

UFAD programs were marketed by advertising on daily newspapers, brochures and pamphlets to catchment areas like secondary schools and through industrial attachments, participating in university exhibitions, trade fairs and shows including road shows. Plate 6 shows FAD students from UoE modelling as a marketing tool for Unga Ltd. Products during a trade fair at the university premises.



Plate 6: FAD Students from UoE Modelling during a Trade Fair

The UEAB FAD department mentioned that announcement of FAD programs during church meetings countrywide were done as a marketing strategy for the program. There were varied views with respect to universities' commitment in marketing the FAD program and liaising with the FA industry with some heads agreeing that the respective university administrations were committed and other university administrations were not. This observation could be as a result of lack of recognition for the profession as noted by Edwinsson and Nilson's [13] who found that students, especially males, were discouraged from joining the fashion design profession as it was regarded to be of a lower status. Mugendi [15] too points out the lack of recognition for design profession in Federal University of Technology in Nigeria. It is therefore worth noting that the UFAD programs need to be given more recognition by university authorities and be marketed adequately so that the profession can gain popularity in Kenya and be given more attention in the training institutions hence development of skills for the FA industry.

IV. Conclusion And Recommendation

Evaluation of FAD programs was done by all the universities, ranging from internal moderation, external moderation, Directorate of Quality Assurance and other stake holders in the industry. Performance standards were evaluated through ISO tools, students' evaluations and external evaluations. This study noted that some UUFADSs had complaints concerning UFAD course mark allocation and they further recommended that during evaluation, practical part of a course should be allocated more marks than the theory part. Ascertaining teaching/learning through moderation of examination scripts by an external examiner was therefore not an adequate way of evaluating practical courses such as FAD.

The rating of the factors related to learning by the UUFADSs and UFADGs was generally low, indicating that these factors were poorly delivered or practiced as perceived by the 3 categories of respondents. The use of IT and visits to industry were rated the lowest, implying that the respondents perceived that there is still a lag in technology in learning of FAD at Kenyan universities as demonstrated by the low adequacy index of IT (1.22 out of 3).

Based on the findings of the study, this paper recommends that the Kenyan UFAD departments should review their course evaluation so that mark distribution is done according to the nature of the course. For example practical courses which are practically very demanding to the students should be given more weighting to encourage the students to learn more practically hence acquire the relevant skills. Practical courses should be externally evaluated practically and continuously during the learning process. Evaluating such courses by marks scored on a written examination script is not appropriate for such courses. Further, the UFAD departments should encourage more fashion industry visits or have some industry based learning as well as invest more on use of IT by both staff and students.

References

- [1]. Mbae, J. G. (1995). A Critical Look at Some Aspects of Learning Evaluation in Kenyan Universities. *Maseno Journal of Education, Arts and Science*, 2 (2), 163-170.
- [2]. Kirsty, D. (2010). The State of Entrepreneurship in South Africa. Paper Presented for FNB Business Banking at Mount Nelson Hotel – November, 17th, 2010.
- [3]. Brimble, P., & Doner, R. F. (2007). University-Industry Linkages and Economic Development: The Case of Thailand. *World Development*, 35(6), 1021–1036.
- [4]. Otiso, K. M. (2004). Africa Growth and Opportunity Act and the Textile and Footwear Industry in Africa. In McCormic, D., & Rogerson, C. (Eds.). *Clothing and Footwear in African Industrialization*. South Africa: Africa Institute of South Africa.
- [5]. Mager, D. (2005). China Textiles Curb a Little Relief for Africa. U.S.; New Era (Windhoek). Retrieved from: <http://www.allAfrica.com> Retrieved: June, 2nd 2005.
- [6]. Hounsell, D. (1994). Educational Development. In Bocock, J., & Watson, D. (Eds.) (1994). *Managing the University Curriculum: Making Common Course*. Britain: Society for Research in to Higher Education (SRHE) and Open University Press.
- [7]. Challis, S., Sayer, K., & Wilson, J. (2005). Seamless Knitwear: the Design Skills Gap. *The Design Journal*, 9 (2), 39-51
- [8]. Skillfast UK (2005). *Sector Qualifications Draft Strategy*. Leeds: Skillfast-Uk Ltd.
- [9]. Yang, M.Y., You, M., & Chen, F.C. (2005). Competencies and Qualifications for Industrial Design Jobs: Implication for Design Practice, Education and Student Career Guidance. *Design Studies*, 26, 155-189. Retrieved from <http://www.hesa.ac.uk> Retrieved: August, 23rd 2005.
- [10]. Feather, B. L. (1996). Challenges of the 1990's Clothing and Textiles Enrolment: Trends and Program Issues. *Clothing and Textiles Research Journal*, 14, 29-37
- [11]. Digolo, O. (2006). Challenges of Education in Kenya in the 21st Century. *The Educator; A Journal of the School of Education, Moi University*. 1(1), (i-xxvii, 1-226), xiv-xxviii.
- [12]. Muigai, P., Kipruto, J., & Korir, R. (2007). Perceived Relevance of undergraduate Degree Programs to students' Career Prospects: A case study of Moi University. *The Educator: A Journal of the School of Education, Moi University*. 1 (2), (i-xxvi, 1-270), 185-198
- [13]. Edwinsson, L., & Nilson, A. (2009). *Dignity IV: Fashioning Kenya - A study of Kenya as a market for domestic fashion brands*. The Swedish School of
- [14]. Kurz, E. (2010). *Analysis on Fashion Design Entrepreneurship: Challenges and Supporting Models*. Unpublished Masters Thesis. The Swedish School of Textiles.
- [15]. Mugendi, M. (2012). *Engaging Change: an African Perspective on Designing for Sustainability*. Retrieved from: <http://www.changingthechange.org> Retrieved: March, 15th 2012.