

Assessment of the adoption of apparel computer aided design technology training in selected public universities in Kenya

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The study examined the levels of adoption of Computer Aided Design (CAD) technology in training of clothing, apparel design courses. Application of apparel CAD technology in the training of the future labour force is a major step in coping with dynamic changes apparent in the textile and apparel industry. Application of apparel CAD technology in production processes in the textile and apparel firms is crucial if the industry is to remain competitive in the global market. The study aimed to establish whether apparel CAD training in selected public universities adequately addressed the changing labour requirement in the Kenyan apparel market, new demands in global apparel market and Kenya Vision 2030. The study focused on determining the status of apparel CAD technology program by assessing course contents, availability of teaching/learning resources and manpower to handle apparel CAD training. Descriptive survey research design was employed to investigate and describe status of the adoption of apparel CAD training in selected public universities and to determine established collaboration between universities and apparel industries in Kenya. A survey of 113 respondents from public universities and apparel industries was conducted. A total of 62 student respondents who included all third and fourth years as well as school-based and masters students from apparel design departments in the three universities, were purposively selected because they had undertaken a unit in apparel CAD. Twenty one lecturer respondents drawn from the three universities in the apparel design departments were included because they imparted skills to the students. Thirty heads of departments from six apparel industries were selected because the employees and interns worked under them. The universities included in the study were; Kenyatta University located in Nairobi; Moi University in Eldoret, and Egerton University in Nakuru. Apparel Industries included United Aryan (EPZ) Limited and MidCo Textiles (EA) Limited from Nairobi, Global Apparels EPZ Limited., AllTex EPZ Limited and Protex EPZ Limited from Athi River and Ken-Knit (Kenya) Limited from Eldoret. The study employed document analysis, questionnaires, interview schedules and observation checklists to obtain the data. The result showed that the adoption of apparel CAD technology at the public universities was low. The lecturers who had been trained in state of art CAD technology accounted for 28.6%: Appropriate CAD hardware and software teaching/learning resources were limited and accounted for 23.8%. The training students received was inadequate to prepare them to work in apparel industry. Only 23.3% of the students on industrial internship in apparel industries were rated as adequately trained. CAD courses did not adequately address specific areas of apparel design but dealt with basic introductory courses such as Corel Draw, Adobe Photoshop, and Adobe Illustrator. Heads of departments in the apparel industries pointed out that there was shortage of practical skills among the graduates and interns, whereas student respondents indicated provision of CAD

hardware and software as the most urgent need. Lecturers in the departments of apparel design indicated that there was need for lectures to be trained in apparel CAD. Analysis of variance (ANOVA) results showed that there was no significant difference between computed means of respondents in relation to student knowledge in apparel CAD by the industries, students and lecturers and therefore, they agreed that the training on CAD technology the graduates received did not adequately meet the labour requirement in the apparel industry. It was concluded that collaboration between the universities and apparel industries in the area of curriculum development, CAD training for academic staff and students as well as provision of CAD teaching and learning resources be promoted