

Reflections on the impact of Competency Based-Training (CBT) Pedagogies on Fashion Design and Textiles Education at Accra Polytechnic

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Abstract

Teaching and training methods in vocational and technical education has gone through a lot of revolution and that of Fashion Design and Textile curriculum at the department of Fashion Design of Accra Polytechnic is no exception. The researchers investigate into the Competency Based-Training (CBT) in Fashion Design and Textiles Education at Accra Polytechnic. What has been done since the inception of the CBT Programme in 2005. What has transpired since the end of the NPT Project, October 2009. The study looks closely at the major changes that have been made in the CBT curriculum and the results the changes produce. This study looks at the major areas and the general effects the changes have on the students' performance just between the periods of 2008 till 2012 academic years. The areas covered include: competencies, the Fashion building, acquisition of tools and equipment, training of staff among others.

Keywords: Competency based-training, Umbrella assignment, Industrial attachment, stakeholders.

1. Introduction

The goal of the CBT approach to teaching and learning is to produce better skilled and more competent students who will meet the standards of the world of work. Also, in the long run, beneficiaries can positively contribute to the growth of the Design, Textiles and Garment Industry. Again, a CBT approach to Education will create a new impulse for the industry and also help to stimulate economic growth. In the long run, graduates will become employers or find more meaningful employment and support the development of the nation as a whole.

Again, it has become very important that students and graduates become specialists in a specific area of the fashion design and the textiles industry. The industry demands these specialists. The final year offers the students this opportunity to specialize.

In the CBT approach, students are supervised and coached during their studies with regard to their processes and choices within the study programme. In summary, the student gradually becomes a proactive, independent/autonomous learner who increasingly directs his / her own personal and professional growth.

The core objective of the CBT approach in this programme is concerned with creating strong links with the industry and creating rich and challenging learning assignments through which students learn to develop their ability to perform professional tasks. The backbone of the programme is created in an environment in which students learn to function professionally in a design, production and distribution in line with fashion and textiles. In addition to this, the curriculum gives attention to increasing the students' confrontation with the world of work and the autonomy of the student in his / her learning activities. NPT/GHA/046 (2010). Ghana, Final Report.

1.2. Competency Based-Training, Definition

Competency is the quality or state of having sufficient knowledge, judgement, and skill to carry responsibility and provide services (Nasseh, 1996).

A competency is defined as a "statement that can describe the observable demonstration of composite of the specific skills" (Hall & Jones, 1976). Competency is also a description of what somebody can (do).

1.3 The objective

- The main objective of this study is to investigate the impact of the revision of the Fashion Design and Textiles Curriculum since 2005 and
- What has been done since the end of the NPT/GHA/046.

1.4 Summary of Research Competency Based-Training (CBT) since 2005 to date for Higher National Diploma (HND) Fashion Design and Textiles:

- Industrial needs assessment survey and competencies
- Revision of the Old Curriculum
- The fashion design Building
- Acquisition of Tools and Equipment
- Staff Training (in the Netherland and Ghana)
- Student enrolment
- Implementation, Teaching/Training, methodology
- Stakeholders meetings
- Industrial attachment

1.5 Industrial needs assessment survey and development of competencies

A team of two Dutch Juniors and a staff of the department of Fashion Design and Textiles, Accra Polytechnic undertook six weeks visit to selected Textiles and Fashion industries in Ghana. During the visit, they did a survey of the job profile of the companies visited. This forms the base for developing the competencies needed at the world of works. A collaborative effort of a team of Dutch delegation from the HKU, consisting of the HOD from the Fashion Design Bachelor and the Masters Programme, a curriculum developments expert and the NPT–Project – Coordinator, and the Ghanaian counterparts from NABPTEX, NAB and NCTE and the staff of the department of Fashion Design and Textiles, Accra Polytechnic were all present to discuss and developed a classification of eight competencies in June 2007. The competencies include:

- Capacity to design
- Capacity to produce
- Entrepreneurial capacity
- Capacity to organize
- Capacity to communicate
- Capacity to collaborate
- Capacity to reflect, learn and innovate
- Capacity to interact with and relate to target groups, the market and the world of works.

2. Revision of the Old Curriculum

This section describes some of the main results of the CBT curriculum Design process of the Fashion Design and Textiles programme. In redesigning the curriculum a number of steps were taken to facilitate the design process and to ensure stakeholder involvement and agreement on different out comes. The steps taken include:

- Initial development in Utrecht with Accra Polytechnic Fashion Design and Textile (FDT) Team, June 2006.
- Stakeholders meeting in Accra, April 2007.
- Curriculum development workshop at Accra Polytechnic with FDT, June 2007.
- Stakeholders meeting in Accra, August 2007.
- Documents were sent to NABPTEX and then Industry and other stakeholders for comments.
- Appraisal Workshop and finalization of the document for accreditation.

2.1 Major Components of the Programme.

	Percentage	Credits
General Education	X	X
Related Studies.....	X	X
Specialist Studies.....	X	X
Total.....	100	100

Details of major components

General Education. Credits X

- Computer Literacy I and Application (II & III)
- African Studies (Replaced with History of Fashion and Textiles)
- Communicative Skills I
- Entrepreneurship (I & II)
- Research Methods (Artistic research for design projects, Umbrella assignment and Graduation Collection).

Related Studies

- Business Management
- Fashion Merchandising
- Production Management
- Fashion Marketing
- Entrepreneurship

Specialised Studies

- Pattern Technology
- Garment Technology
- Textiles
- Fashion Drawing and illustration (Computer presentation and Fashion illustration skills)
- Clothing Management Technology
- Fashion Design
- Fashion and Textiles History
- Fashion Accessories
- Industrial Attachment
- Project work, Collection/Portfolio/Fashion Show

2.2 The Fashion Design Building:

The new building like the new equipment contributed largely to the success story of the project. Some air conditioners in the new building and furnishing were done with the NPT Project fund. (See appendix A with respect to the new building). Also in the building plan, a lot of effort was put in to match the building with the CBT practice. Therefore a lot of funds was invested to include fashion and textiles industrial machines and to design a layout that resembles the state-of-the-art in the garment and textiles industry. One of the key factors in this success was, the Development Officer of Accra Polytechnic did the technical layout for the new fashion building.

2.3 Acquisition of Tools and Equipment

A lot of equipment has been provided to Accra Polytechnic. A number of training sessions were planned for the supporting technical staff. Nevertheless, the department need to provide for balanced budgets to maintain the current state-of-the-art equipment.

Martijn Bruckman and Maurits Veldhuyzen van Zanten are two Dutch Junior Lectures who visited the Fashion department in the Months of March and April of the year 2009. They Installed iMac Computers donated by HKU

to Accra Polytechnic, assisted in the networking and trained the staff of the department on the use of the iMac Computers.

2.4 Staff Training (in the Netherland and Ghana)The staff development activities organized in the NPT project and the additional staff trainings were financed through different funding which has contributed heavily to the project's success. Some staff members demonstrated a remarkable professional growth through the staff development activities. This progress is especially apparent for some in the areas of pedagogy, design, project management and ICT.

2.5 Student Enrolment

One of the Specific objectives of the CBT Curriculum is to strengthen educational quality, capacity, facilities and industrial linkages of the Accra Polytechnic Fashion Design and Textiles Curriculum and its ability to meet the sector's demands for creative and innovative professionals by providing competence based training which will lead to the academic output of 80 graduates annually. In fact students' enrolment *figures* rose to One hundred and twenty students during the 2012/2013 academic year.

2.6 Teaching/Training Methodology

Since the implementation of the CBT curriculum in 2008, staffs have continuously put in effort to improve their teaching methods. Staff experienced the CBT curriculum as worthwhile and also implemented some of the new teaching strategies in the 'old' curriculum. Staffs have become more confident in teaching now than ever before.

2.7 Stakeholders meetings

A team of four Dutch officials made up of the Dean, The Finance Officer, The NPT Project Coordinator and the CBT Curriculum Expert of the HKU arrived from the 3rd- to the 8th October 2009 to prepare for the final Stakeholder's meeting. The Stakeholders meeting took place at the British Council Auditorium in Accra. Stakeholders include: NABPTEX, NAB, NCTE, Captains of industry, The FDT team and teachers from sister Polytechnics that offer Fashion Design and Textiles Education.

2.8 Industrial attachment

The first year students are trained such that by the end of the first semester they might have acquired the basic fashion design and production skills, knowledge and the requisite attitudes. Students are given a task to perform. In the execution of this task, it is important for the students to apply the new capacities acquired in an authentic context in a real industrial set up. "This will create the opportunity for the student to transfer what they have learned into a realistic setting in the production line that will be constructed in the new Fashion Design Department building of Accra Polytechnic". NPT/GH/046, (2009) Final Report. Here the student offered the opportunity to learn in a relative 'safe' learning environment in close relationship with the world of works. In the production line students work on assignments that are acquired from partners in the industry. For example: Students work on production of garments for a company or school clothing. Staff members from the Fashion Design Department and the liaison officer generate the authentic tasks and assignments and should therefore create and maintain a strong network with relevant partners. The main focus during this in-house industrial placement is on production skills, knowledge and attitudes.

In the second semester of the second year, students go out for an industrial attachment for a period of sixteen weeks or four months. The departmental and the institutional liaison officer offer the students support in searching for a placement that is most relevant for the personal and professional growth of the student. It is preferable that students should try to seek for a placement, which is relevant to their area of specialization (Garment Production, Textile design and Production or Fashion and accessories design) in the third year.

2.9 Assessment and Certification

Trainees are assessed on every model or course and graded. Assessment is formative and summative.

Higher National Diploma (HND) Certificate is awarded by the NABTEX at the end of the programme to successful candidates.

Certificates are awarded at two levels as follows:

Class title	Average
Distinction (Honours)	Average 85% and above
Pass /Competent	50%
Fail /Not yet competent	Below 50%

2.10 The Umbrella assignment

In the second semester of the first year, students work on an Umbrella assignment. This assignment is rather challenging, because students do not possess all the necessary design and production skills at this stage to successfully perform this task therefore the students will need to identify what they need to learn, which becomes their motivation to learn the required skills. This model of training influences the role of *the* teachers as well.

Therefore students are given a creative and innovative assignment in which they need to work according to a specific theme. During this project, they have to follow all the steps in the design process (theme, moodboard, design, drawing, production and presentation).

For example an umbrella assignment for the students (first year, second semester):

Search for a Traditional garment from your Region of birth. Using this garment as your motivation, design and produce a modified trendy garment and the accessories– based on the traditional one.

3. The Challenges

- Short teaching and learning periods. The policy of the Polytechnic that require students to register in two weeks at the beginning of the semester and also use the last three weeks or more for writing end of semester exam robs the CBT curriculum of time for teaching and learning.
- Large class sizes make it difficult to execute all planned lessons especially in skilled classes.
- It also requires enough equipment for every trainee at the same time. In case of large classes, some trainees do not get access to practice enough on the tools and equipment available in small Quantities at the moment.
- It is a little more expensive in the short run to employ and teach in Project based classes. This is because it requires more than one trainer to plan, execute and evaluate the trainees.
- Even in the CBT curriculum there is still too much contact hours, thus about thirty one hours.
- Also, there are too many courses fighting for space on the teaching timetable. Hence, insufficient time for self-study on the part of the students. Students are not really able to choose and specialize because there have been expressed desire among students as to who is in the best area of specialization in the course of the final year of the programme.

4. Discussions and Conclusions

The assessment procedures and criteria have been a recurrent concern in teaching the CBT curriculum. Therefore a training session was organized in March 2009 to focus on this issue.

The governmental frameworks on how to readjust assessment procedures that are concurrent with the CBT approach are not available yet. Assessment is still conducted according to former ideas on teaching (where practical and theoretical components are assessed separately). During the closing mission in October 2009, in preparation of the stakeholder meeting, a thorough student and staff evaluation of the CBT curriculum was conducted. Students and staff indicated that they recognize the established competency profile and that teaching in general is student-cantered. Also, some of the curriculum changes, like the introduction of the umbrella assignment, industrial placements and specializations were evaluated quite positively (with averages around 4.0 on a 5-scale-Likert). NPT/GHA/046 (2010), Ghana Final Report. When students were inquired on one of the most important project aims, to increase innovate and creative design, they valued this item with a 4.3 (the highest score in the questionnaire). In general, students are also positive about the quality of teaching staff. Although, there are two exceptions: Students feel that the staff are not really knowledgeable about the fashion industry and therefore are not able to connect their teaching to the future world of works (average score of 2.9). Also, when asked about the fairness of assessments and whether it measures the learning objectives, students provided an average score of 2.5.

It is worthy to note that the experience of the staff and the tools and equipment in the department of Fashion Design and Textiles have also been made available to benefit the Bachelor of Technology programme that has started running since 2010.

5. Recommendations

From the above observations, one can see clearly that the review of the “old” Fashion Design and Textiles curriculum that has brought about the competence-based training has a lot of advantages. This is because even

with the challenges listed above, students are gradually becoming independent learners. Trainees are also becoming more innovative and creative. Trainees are becoming employers or find more suitable employment after graduation. Placement of interns has become much easier than before the inception of the new curriculum.

Besides, the staffs have become more competent hence more confidence in delivery of the lesson they teach.

The provision of a new building has provided more space for expansion and a more friendly teaching and learning environment.

Provision of modern industrial tools and equipment for design and production of Fashion and Textile products have facilitated effective teaching and learning in the Competency based-training.

The next level of this research will have a closer look at the individual major components of the review exercise.

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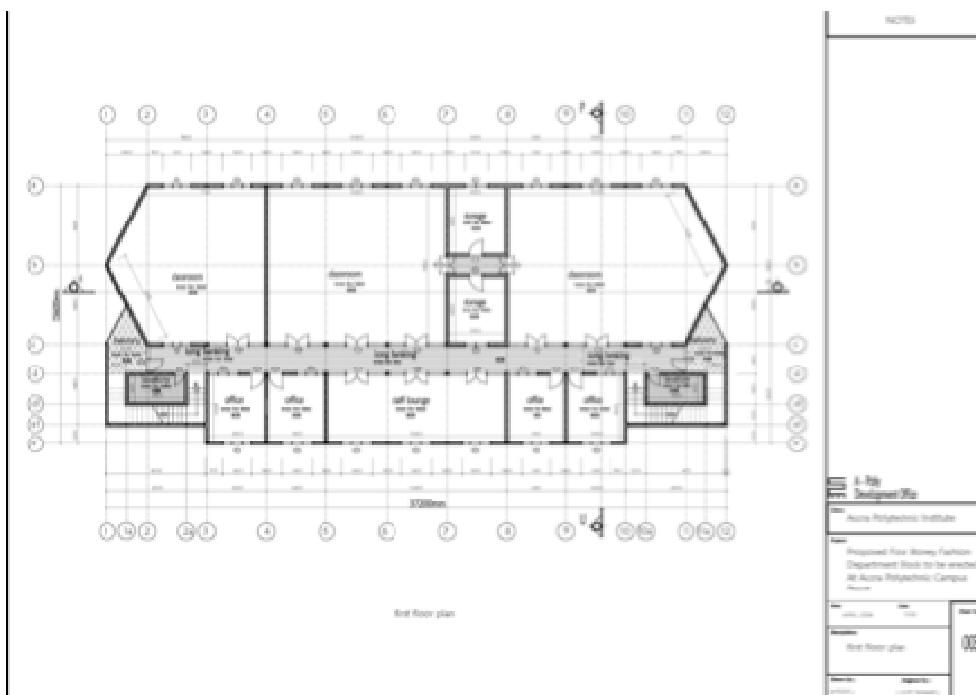
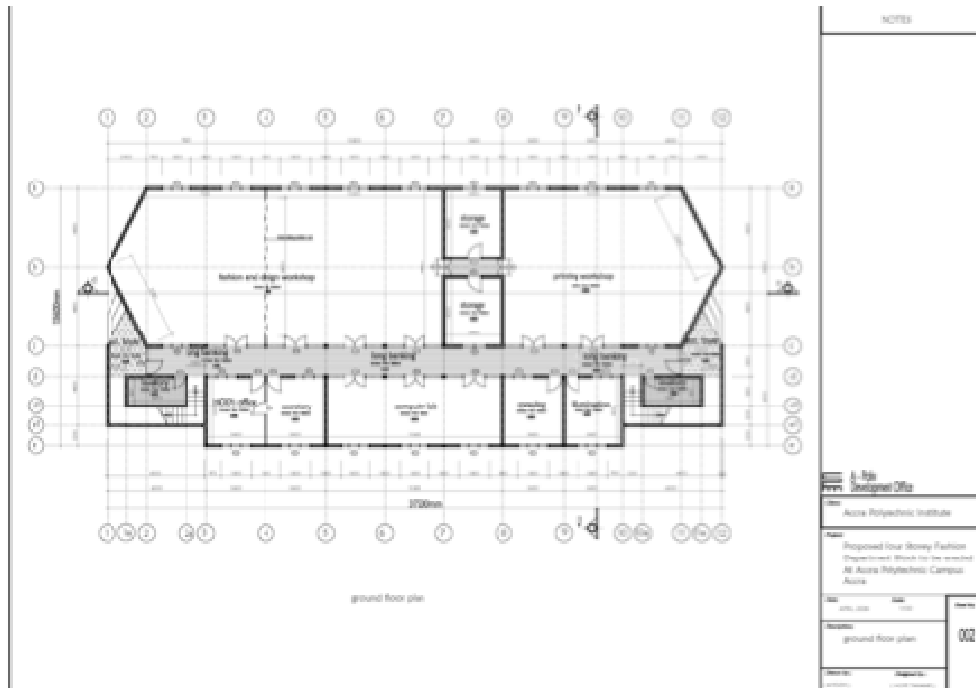
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Note 1. Appendix A: Lay out of Fashion Design Building. Design By: Hope Tasiame (Development Officer)



Final evaluation report (NPT/GHA/046), February 2010.

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