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Design of School-Based Enterprise for Competency-Based Training Programmes

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Abstract

JICA performed the Study for Development of a Master Plan to Strengthen Technical Education in the Republic of Ghana in 2001 at the request of the Ghanaian government. The study proposed the adoption of competency-based training (CBT) in Polytechnic Education (now Technical Universities) as a way to address the widening gap between the competencies required by companies and the skills of trained graduates. This advice was followed, and in 2004/2005 the NPT/NUFFIC CBT Curriculum in Fashion and Textiles, titled "Design and Production of Fashion and Textiles," was launched. It was successfully piloted and reviewed in October 2009. According to preliminary analysis, the new HND CBT Fashion and Textiles program lacked practical entrepreneurship competencies. In order to build a conceptual model of SBE for the HND CBT Fashion and Textiles program at Ghanaian Technical Universities, the study set out to explore a few best practice approaches to CBT business education in fashion and textiles. The descriptive-survey and case study methodologies were used in the study, which followed a mixed methodology approach. The survey found that graduates do not display PBCs on the job and that the HND Fashion and Textiles degree today has less of a connection to the real world of work. This conclusion from case studies involving students supported earlier findings of researchers by Stern et al. (1994), Gugerty et al. (2008), Stratton (2008), Smith et al. (n.d.), and DECA (n.d.), which indicated that SBEs are effective in ensuring productive education with sufficient transferable skills that graduates can use in their future careers. Using this information as a foundation, a conceptual model of SBE has been created and will be incorporated into the new HND CBT Fashion and Textiles curriculum. According to the study's findings, if PBCs are possible to obtain, the educational system has neglected a significant number of competency areas, necessitating a revisitation by planners and trainers. The new HND CBT Fashion and Textiles curriculum should emphasize SBE integration as a suggested intervention that could help the situation.

Keywords: Curriculum, School-based, Competency-based, Enterprise, Training programmes.

1.0 Introduction

In response to a request from the Government of the Republic of Ghana, the Government of Japan conducted a technical cooperation project called the Study for Development of a Master Plan to Strengthen Technical Education in the Republic of Ghana (the JICA Study). The JICA Study identified that, 'the HND curricula of Polytechnics (now Technical Universities) were more theory-oriented than those of the Craft and Technician courses, and that theory based mid-semester and end-of-semester examinations are the predominant forms of assessment' (JICA, 2001, p.49). This position is corroborated by Boahin & Hofman, (2010). This often causes a significant mismatch of persons trained in TVET institutions and the skills needed in industries (JICA, 2001 & Adipah, 2000). As a curative measure the Study proposed adopting a Competency-Based Training (CBT) approach in the TVET Sector (JICA, 2001).

In response to these developments, the Netherlands Programme for the Institutional Strengthening of Post-Secondary Education and Training Capacity (NPT)/Netherland Universities Foundation for International Cooperation (NUFFIC) Competency-Based Training (CBT) Curriculum in Fashion and Textiles, titled "Design and Production of Fashion and Textiles," was launched in 2004/2005 and was successfully piloted and evaluated in October 2009. According to preliminary data, the new HND CBT Fashion and Textiles program lacked practical entrepreneurship competencies. The new curriculum did not address the problem, such that these business courses were still handled theoretically with no effort to make them practice-based. Owing to the theoretical approach in handling the business courses (which already were scanty in the curriculum) the following important employability and enterprise skills were virtually absent: practical training in identifying market demand for goods and services; practical training in identifying sources of quality and less expensive raw materials for production purposes; practical training in standardized procurement practices and processes for raw materials and services; and practical training in finishing and packaging of finished products and services. Also, visibly absent are: practical training in advertising and promotion techniques to facilitate marketing; practical training in sales and marketing of goods and services for profit; practical training in costing, pricing

of works produced/services rendered; and practical training in book keeping, cash handling and financial management. These observations confirm Adipah's (2000) position that, the curricular of most art institutions are deficient in trade and industry related skills. The shortcoming displays an obvious hole that required immediate correction. This created the context for the study's search for methods to include Practical Business Competencies (PBCs) in the new HND CBT Fashion and Textiles curriculum in order to overcome the entrepreneurial gap. The study's goals included developing a conceptual model of SBE as part of the HND CBT Fashion and Textiles program at Ghanaian Polytechnics and examining a few best practice approaches to CBT business education in fashion and textiles (now Technical Universities). The study focuses on Competency-Based Training and Practical Business Skills development acquired through productive activities in school. The study centres on an art–based programme (HND Fashion Design and Textiles) and the specific competencies, skills and attitudes needed to enter and practice successfully in these creative industries.

According to research by Carnoy (1980), numerous nations have started huge vocational education programs under the assumption that basic practical skills combined with fundamental theory will lead to self-employment. Carnoy (1980) noted that producing talent does not, by itself, evoke materials, the market, or employment. According to UNESCO (1996), the organization of trainees into producer cooperatives and the providing of early cash to stabilize the activity are what actually seem to function. Stern et al. (1994) argue that productive learning occurs in schools when students are reinforced with work experiences that follow the rules of vocations, which is in line with the claim made by UNESCO (1996). Apart from the Practical Business Competencies (PBC) that students acquire by engaging in School-Based Enterprises (SBEs), there is an added benefit of income generation. The JICA Study (2001) aside from recommending a CBT approach, also endorsed the SBE concept. The need for work-based training is timely since there is a current global population explosion and dwindling employment avenues creating less and less opportunities to engage trainees on the job. This means that the excess workforce must acquire attitudes, skills and competencies in school to work independently or in teams in small and medium size businesses (Quarshie, 1986). In the light of this, Fashion and Textiles programmes offered by

Technical Universities in Ghana would guarantee better outcomes if business/enterprise structures (SBEs) are adopted into the CBT curriculum. Nsiah-Gyabaah (2007) asserts that several authors have defined competency-based training in various ways. Some people use the words competency-based education (CBE) and competency-based learning (CBL) to characterize education that emphasizes acquiring the competencies required to be able to execute professional responsibilities and to promote their approach to building curriculum. Nsiah-Gyabaah (2007, p. 79) cites Agodzo (2005) who characterized competency-based learning as "do-it-yourself (DIY) learning." Agodzo (2005) asserts that a graduate who underwent CBT should be well-prepared for practical job that requires hands-on experience, as evidenced by the precise activities he can and must perform. According to Dare and Kouwenhoven (2009) a simple description of competence is 'the ability to perform a task up to standard' and that it is not difficult to see that competence relates to the world of work. The Cardiff University (2012) recorded that the need to target training towards employment attracts many educational institutions worldwide, and developed a five-year strategic plan to provide an inspiring and enriching educational experience for its students. School-to-work transitions is also receiving vigorous attention in Japan. According to Hitoshi (2000), older Japanese students participate in organizations (school-based set-ups) as part of their entrepreneurship education to develop product ideas that make use of local resources, create fictitious businesses, and create business plans that cover everything from prototyping to sales. The school will then support the students after they submit their plans, allowing them to really sell their goods in the community. Adipah (2000) observed that skill plays a crucial role in self-employment but unfortunately planners have not been concerned with laying actual structures for skills in the educational system for self-employment. Thus, research needs to be conducted into the informal sector about self-employment to be adopted into mainstream vocational/technical education (Adipah, 2000). This position is corroborated by Shacklady (1997) that any student considering a career in the creative profession should know that, for the most part, employments in these areas require abilities or capabilities that are not necessarily creative; one may be required to obtain technical or business skills. It will entail long-term planning regarding the path one will take, as well as the desire to make personal commitments to promote one's aspirations by taking

on unpaid or voluntary work in the selected profession, according to Shacklady. Stankiewicz (1996) advocated that in recent times art educators would do well to think critically about the role of the arts in school-to-work transition. He agrees to Parker's position that visual arts education should facilitate workplace readiness. In Parker's (1994) view experiences in the arts teach skills that can be transferred to the workplace. In advanced countries, especially the USA, efforts made towards school-to-work transitions has culminated in extensive research and implementation of many work-based learning (WBL) programmes. It should be noted that these models lack official definitions; rather, they have developed informally, and even experts disagree on some of the key traits of each (OTA-Princeton, 1995). Additionally, some work-based learning initiatives have built their own models or purposefully changed existing ones. Rarely do actual actions exactly match up with initial intentions. Work-Based Learnings, according to Stratton (2008), are planned activities incorporated into the curriculum that put information and skills taught in class to use and link those learnings to real-world experiences. Supporting the idea of WBL, Smith et al. (n.d.) stated that policymakers and educators are beginning to accept education through work-based learning programs as a way to improve the educational outcomes for many students. These programs help high school students develop both intellectually and professionally. Changes in the global economies, educational systems, and the greater emphasis on the value of preparing students for the world of work have all contributed to this increased adoption of job-based learning programs. According to Smith and his colleagues, the goal of educating students for the workforce is not to compromise academic brilliance but rather to combine academic and occupational education to make the connection between school and the workplace. Smith *et al.* (n.d.) supported the idea that students should be given every opportunity to receive academic and occupational preparation that equips them with the necessary skills for obtaining employment and/or for further education. It is gratifying to note that Smith *et al*. (n.d.); Stratton (2008) and OTA-Princeton (1995) acknowledge the importance of School-Based Enterprise. Smith *et al*. (n.d.) and Stratton (2008) established a close relationship or similarities between school-based enterprises and entrepreneurial ventures/entrepreneurship. A School-Based Enterprise (SBE) is defined by Stratton (2008) as; 'a simulated or actual business conducted within a school. It is designed to

replicate a specific business or segment of an industry and assist students in acquiring work experience related to their chosen career cluster' (p 6-1). Smith *et al.* (n.d.) defined School-Based Enterprises and Entrepreneurial Ventures as; 'work-based programmes that teach students to assess and develop their knowledge, skills, and abilities necessary to create and administer a small business enterprise from a school-based location' (p.102).

School-Based Enterprise (SBE) is described by Gugerty and associates (2008) as "a prolonged, school-sponsored, student led activity that engages students in the production of goods and services for the school or the community" in a research that was performed between 2001 and 2006. According to Gugerty et al. (2008), the idea of a school-based business is not new, but it has not traditionally been used to help special education students gain employability skills while also providing them with direct connections to their academic work. According to Stern et al. (1994), the concept of school-based enterprise is not brand-new. The English political philosopher John Locke was one of the first proponents of productive education, according to von Borstel's (1982) historical analysis of the idea, which Stern et al. (1994) noted. This concept was introduced into the twentieth century by the American philosopher John Dewey, who persistently argued that students learn best when practical experience is an essential component of their education (Berryman, 1992; cited in Stern et al., 1994). On the range of SBE activities, it is reported that three basic types of businesses that may be incorporated as School-Based Enterprises are retail, service, and manufacturing (Stratton, 2008). From the researchers' observation it becomes clearly evident that, the mention of manufacturing enterprises identifies vividly with visual art vocations and therefore establishes a strong basis for the success of SBEs established as part of HND Fashion Design and Textiles programmes. Gugerty and his team (2008) found that students who took part in a model SBE project learned how to use modern software used in many businesses (spreadsheet and database software, online sales); they also became familiar with real-world business practices; they learned about inventory; they put standard accounting and money management procedures into practice; they developed and carried out marketing and advertising strategies; and they established and maintained good customer relations. The SBE's product or service as well as the

mathematical, written, and verbal processes used to run the SBE were all subject to quality control procedures that the students implemented. They also formed, maintained, and worked in teams; oversaw and gave feedback on others' performance; and effectively interacted with a variety of students, school personnel, and community adults. Additionally, students completed marketing and feasibility studies, made important decisions regarding the products/services, and collaborated with school staff to create the SBE's organizational structure, personnel policies, hiring methods, and procedures. Additionally, students worked with their teachers to create participation incentives, decide how, when, and by whom the good or service would be produced and delivered (including costs, pricing, production, advertising, and distribution), and deal appropriately and effectively with the plethora of interpersonal, communication, scheduling, and other issues that come with starting a new business (Gugerty et al., 2008). Entrepreneurship education according to Stratton (2008), allows students to develop a deeper understanding of economic principles and to apply classroom learning by organizing and operating a business enterprise. However, unlike Smith *et al.* (n.d.), Stratton treated School-Based Enterprises and Entrepreneurship education programmes separately, though at a closer look (in the researchers' view) they bear some resemblance. Yegge (1995) acknowledged that a Business plan is important for any business regardless of the size. He noted that: 'the plan must be a living document. The plan can be a vital part of thinking and actions contemplated, or actions taken, and may represent a business road map for successful growth and increased profit' (Yegge, (1995, p.3). The difficulty, according to Gugerty et al. (2008), arises when one discovers that his or her business plan will need to resemble a conventional business plan and that it will also need to be a school program with a variety of additional restrictions directly related to the curriculum of the school. Business plans will require you to think ahead to how you will handle money, start-up and operating costs, accounting, advertising, the sort of business structure proposed, and a variety of other things that will be recognized as student learning activities that initially piqued a group's interest in an SBE (Gugerty et al., 2008). Obviously, the details that will make a School-Based Enterprise very different will include school considerations like curriculum adjustments if school credits are offered as incentives to participate, recruitment of eligible students, student leadership roles and

staff assignments and oversights, especially as related to handling the money and other such financial policies, Gugerty and his Associates (2008) noted. DECA (n.d.) noted that a successful School- Based Enterprise needs to conduct research into target market, competition, individual customers, and most importantly, what products and services will be offered for sale. DECA went further to establish that marketing research will take much of the guess work away from SBE personnel. Even though market research is not always hundred percent (100%) accurate; it will offer pertinent information for making sound business decisions. Market Research will help minimize losses as new products and services are introduced (DECA, n.d.).

2.0 Methodology

The study used a mixed method approach and employed the descriptive-survey and case study methods. As such the qualitative and quantitative approaches of research were adopted. The qualitative research approach allowed the researchers to describe, analyse and interpret data gathered. Much of the study was qualitative in nature, and therefore data collected were described and analysed following the descriptive method. The quantitative approach guided the researchers to deal with data in the form of numbers and statistics. Using the descriptive-survey method, data in categories A, B, and D were presented and analysed**.**

Table 1: Population, Sampling, Instruments

Category	Accessible Population	Sampling Method	Sample Size	Instruments & Admin.
A	Entrepreneurs in Fashion & Textiles Enterprises	Purposive	60	Self Admin. Questionnaire. Observatory execution
B	Fashion and Textiles Educators in Ghanaian TUs	Cluster Random Sampling	28	Self Admin. Questionnaire.

C1	Graduates of HND Fashion & Textiles programme (2005/2006 to 2009/2010)	Cluster Random Sampling	100	Questionnaire & Interview
C2a	Students of the HND One Fashion and Textiles programme in KsTU (2007/2008 to 2009/2010 batch)	Purposive Sampling	30	Questionnaire
C2b	Students of the HND Three Fashion and Textiles programme in KsTU (2010/2011 to 2012/2013 batch)	Purposive Sampling	24	Self Admin. Questionnaire
D	Stakeholders in Private Enterprise Development & Higher Education	Purposive	12	Interview
	Fashion & Textiles Production Units			
	Key Officers involved in Fashion and Textiles Production Units	Purposive	15	Interview, Observatory execution

Case study method was used to gather, present and analyse data in category C and those from Fashion and Textiles Production Units. The researcher used the case study method with great caution because, according to Bassey (1981), who was cited by Bell (1999, p. 85), "an important criterion for judging the merit of a case study is the extent to which the details are sufficient and appropriate for a teacher working in a similar situation to relate his decision-making to that described in the case study," the case study's findings should be compared to those of the teacher in the hypothetical situation. It is more crucial for a case study to be relatable than generalizable.

According to Leedy and Ormrod (2005), there are common tools of research that majority of researchers regardless of the field of enquiry use. In this study, three basic tools for data collection were employed; namely observation, questionnaire and interviews. Questionnaire and interview were used in order to make up for each other's shortcomings. The aim of qualitative research is to purposefully select either informants, documents or visual images who or that will best answer the

research question(s) or meet the objectives of the study (Creswell, 1994). The questionnaires were administered to respondents in categories B and C (that is C1, C2a and C2b). Researchers had face to face interviews with sixty (60) managers of the fashion houses (entrepreneurs) provided by the Fashion and Textiles Departments in Accra, Kumasi and Takoradi Polytechnics where students are admitted for attachments. The Art Educators are lecturers on the HND Fashion and Textiles. Information was solicited from this group through questionnaire. Data was gathered from practitioners in Private Enterprise Development Agencies and stakeholders in Higher Education (Category D). The institutions/organisations visited were National Board for Small Scale Industries (NBSSI), Association of Small-Scale Industries (ASSI), Association of Ghana Industries (AGI), Ghana Employers Association, Empretec Ghana Foundation and Ministry of Trade and Industry (MOTI). Among the stakeholders in Higher Education were NCTE, NAB, NABPTEX and COTVET. Data on the Fashion and Textiles Production Units were gathered by using self-administered questionnaires. The purposive sampling method was employed to select the Heads of Departments, Managing Technicians and Key staff who provided experiential data for the study. Analysis of data was mainly descriptive. Based on the objectives of the study and research questions being investigated, the researchers derived associated themes. The themes constitute specific headings under which the responses gathered were assembled and discussed.

3.0 Results and Discussions

The results and discussions are carried out under themes. The themes constitute specific headings under which the responses gathered were assembled and discussed. Where possible data gathered were presented in tabular form showing frequencies and percentages of the responses after-which discussions and interpretations were made.

3.1 Approaches to CBT Business Education

These approaches constitute areas covered to obtain inputs to design the model. The areas are; assessment of PBCs of students, identification of the PBCs, methodologies to impart the PBCs and lastly using SBEs to impart PBCs as shown in figure one (1).

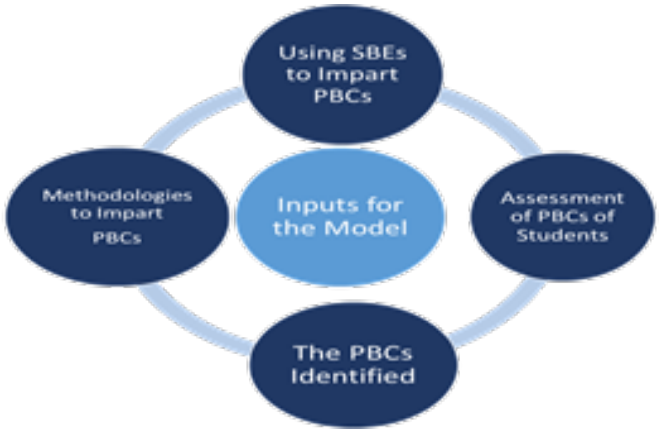

Figure 1: Approaches to CBT Business Education

3.2 Assessment of PBCs of HND Fashion and Textiles Graduates

Prior to the design of the model an assessment of the Practical Business Competencies of the graduated of the programme was conducted. The results are presented in figure two (2). A careful observation of the chart reveals that the entrepreneurs (75%), art educators (68%) and stakeholders (83%) held the opinion that the graduates exhibit inadequate practical business skills. However, for the graduates themselves fifty-three percent (53%) was recorded for adequate while inadequate was forty-seven (47%). The reason being that most of them go into teaching rather than the core manufacturing and business sectors of the fashion and textiles industry. It can therefore be concluded based on the majority position that the PBCs acquired in school is woefully inadequate to practice in the marketplace.

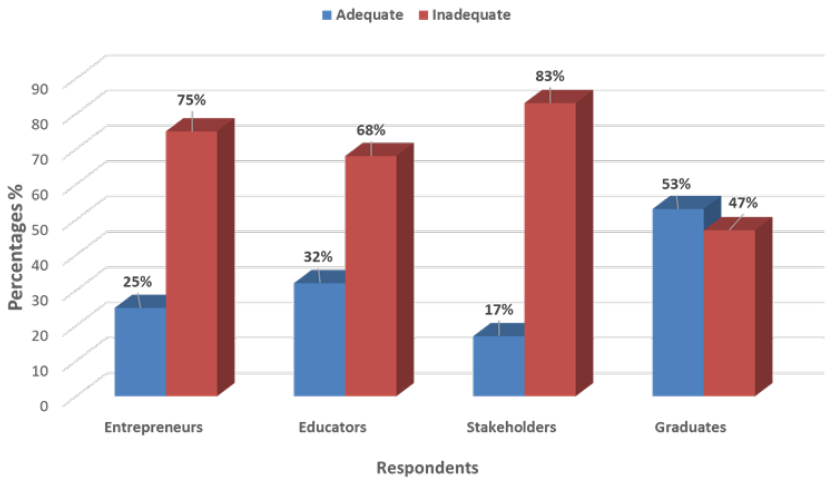

Figure 2: Assessment of PBCs of Students (source filed data)

3.3 Catalogue of Practical Business Competencies (PBCs) needed by Graduates

The professionals in the fashion and textiles businesses who were contacted reaffirmed the significance of numerous Practical Business Competencies helpful to graduates. Regarding the factors that are crucial enough to take precedence over the others, respondents' perspectives varied. The study generally showed that four broad competencies, namely *manufacturing skills* (sourcing of raw materials; economical purchasing of raw materials; economy of raw materials usage; efficiency in production processes; and skillful finishing and packaging); *marketing skills* (identifying market demand; advertising and promotion; customer handling /customer care; and selling skills); *business organisation skills* (business registration processes and establishment; fulfilling legal obligations, i.e. paying taxes, property rates etc.; records keeping, i.e. inventory of stocks, financial records etc.; insurance and business security; handling human resources; and skills in teamwork). and lastly *financial management skills* (ability to cost production/services to generate profit; prudent money handling skills; banking culture/transactions; and sourcing capital i.e. business financing) are useful competencies that graduates must acquire. Analysed data from the field indicated that, ninety-five percent (95%) of the practitioners acknowledge that out of the four broad competency areas, production skill is first most important.

Expressing further views on production skills, all the entrepreneurs (100%) unanimously agreed that competence in production skills alone is not enough to enter and manage a business in the fashion and textiles industry successfully. The acclaimed business men and women in the fashion and textiles enterprises interviewed enumerated additional skills to compliment production skill for a business to succeed. Principally they mentioned the need for one to exhibit PECs (Personal Entrepreneurial Competencies) to be successful in any business venture. These PECs according to Kuriloff *et al.* (1993) and Mchughs (1993) include: commitment to task, choosing moderate risk, seizing opportunities, being optimistic, seeking feedback, setting objective/realistic goals, being proactive, highly energetic, action oriented, and self-directed. The above characteristics or behaviours are sometimes stated differently though they mean the same. The need for students to acquire PBCs supports the views of Carnoy (1980) that production skill alone does not conjure materials, the market, or work.

3.4 Approaches to Develop Practical Business Competencies (PBCs) of Trainees

In Table two (2) a tabulation of the approaches to develop Practical Business Competencies (PBCs) as prescribed by entrepreneurs, art educators, stakeholders in business and higher education and finally graduates of the HND Fashion and Textiles programme are shown. These methodologies and strategies constitute a multi-system approach requiring both conventional and non-conventional means.

Table two (2): Approaches to develop PBCs (methodologies and strategies)

Enterprise	Educators	Stakeholders	Graduates
Multi-system approach (Requires conventional & non-conventional means	Means to acquire PBCs	Adult Learning Methodologies-Interactive Approach	Adopt Student Centred, Activity Oriented Instruction Delivery

1. Exposure	1. Lecturers must orient students	1. Brainstorming, case studies, coaching	1. Focus on Practical Training (instruction & assessment)
2. Observation	2. Set-up SBEs to train students	2. Business Practical Demonstrations	2. Expose trainees to industry and industry practice
3. Experience (learning-by-doing)	3. Industrial practice-Internships	3. Internships	3. Focus on practical business skills development
4. Workshop & Seminars	4. Experience sharing by industrialists	4. Curricula Adjustments (Training Packages)	
5. Requires attitude of humility & service	5. Industrial visits	5. Focus on SMEs	

The strategies are adult learning methodologies that are interactive, activity oriented and student centred. An ideal training environment, the trainer's expertise, and finally the student's interest, willingness, and desire to learn and acquire these skills were all cited as three cardinal criteria that were crucial for ensuring the learning of these skills. These conditions also support the views of Shacklady (1997) and Fufunwa (1971; cited in Ainooson, 2007) that willingness of trainees working voluntarily to acquire skills is paramount.

3.5 Using School-Based Enterprises to Impart Practical Business Competencies (PBCs)

Respondents' desire for the establishment of School-Based Enterprises (SBEs) to train students to develop adequate PBCs for the world of work cannot be over emphasized. Each category of the respondents was highly in favour of schools establishing SBEs; for entrepreneurs it was ninety-eight percent (98%), fashion and textiles educators recorded ninety-three percent (93%), stakeholders in business and higher education recorded ninety-two percent (92%), while graduates of the programme chalked a whopping hundred percent (100%) as presented in figure three (3).

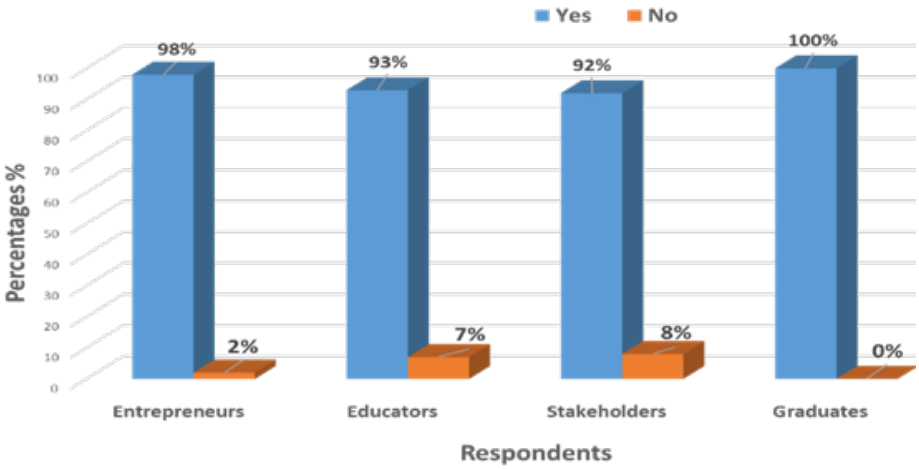

Figure 3: Using SBEs to Impart PBCs (field data 2009)

The endorsement of SBE as part of the Fashion and Textiles programme was backed with a number of reasons; skill training, practical business training and lastly, for financial gains. SBEs according to respondents provide ready access and door-step facility for students to acquire the relevant skills through proper guidance for the world of work and that it offers opportunity for students to be involved in actual practice, as happens at the workplace. Respondents held the view that the opportunity offered to trainees under such programmes will help them learn production processes for various categories of apparel, accessories and fashion goods; be involved in costing and pricing; marketing, promotion, advertisement and sales as well as their involvement in financial handling and management procedures associated with businesses as shared by Gugerty *et al.* (2008) and Stratton (2008). Figure four (4) shows the importance respondents attach to SBEs as a training facility. An overwhelming majority, sixty-four percent (64%) respondents interviewed strongly agreed that SBEs are extremely important in imparting Practical Business Competencies to trainees.

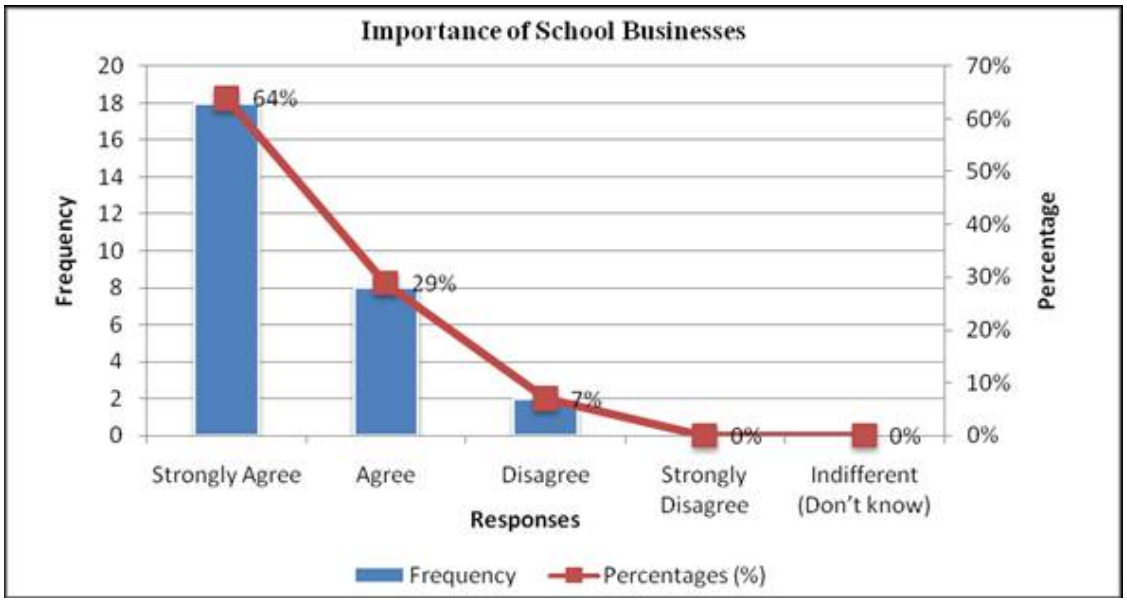

Figure 4: Importance of School-Based Enterprises

Source: field data (July 2009)

An additional twenty-nine percent (29%) 'Agree' to the concept of SBEs while only two (2) respondents representing seven percent registered their disagreement. This supports the assertion that SBE guarantees the concept of 'learning-by-doing' which is central to Competency-Based Training, thus making trainees more proficient in their chosen fields (Nsiah-Gyabaah, 2007).

3.6 Outcomes of Case Studies with Students

A variety of findings from the case study project (which included manufacturing, marketing, and sales) carried out with HND One fashion and textiles students supported the value of SBEs as a platform for gaining PBCs for the workplace. Unlike the preceding case study, the HND Three student's case study project was based on the group approach. Six student groups formed six businesses out of which fives businesses manufactured products for sale while one business group provided service. The project taught students' creative ways to generate business names; develop business plans; conduct market research on products and services; raise capital to start businesses; and also identify sources of moderately priced raw materials for production purposes. None of the

groups recorded a loss, indicating strongly that student businesses can be very profitable as alluded to by von Borstel (cited in Stern *et al.*, 1994).

3.7 Study Report on Production Units as Potential SBEs

Three (3) production units were identified and studied. These were the Kumasi Technical University Fashion and Textiles Sales and Exhibition Centre; the Accra Technical University Fashion and Textiles Production Unit and the Takoradi Technical University Fashion Production Unit. A cursory survey of the production units revealed that the businesses commenced with barely letters of intent and not comprehensive business plans required of business entities. As noted by Yegge (1995), a business plan is a vital part of thinking and actions contemplated or actions taken, and may represent a business road map for successful growth and increased profit. As such the need to re-strategize and developed a business plan to steer the businesses cannot be overemphasized. There was marginal involvement of staff because the units were not set-up as training facilities. The study revealed that there were problems relating to operational procedures, marketing, sales as well as handling of finances which showed ignorance of the existence of the Public Financial Administration Regulations Act (2004). The resultant effect of this was that without proper documentation of the procedures, deviation from the norm would be difficult to detect for corrections. Moreover, no serious efforts were made to market the centres; though strategies to market fashion and textiles goods and services abound. The centres therefore need critical interventions in the area of marketing mix: product quality, promotion, pricing and placement (distribution) to forge ahead of the competition. This is paramount because marketing, advertisement and selling are central to the survival of every business, according to JICA SME Toolbox (2008).

The research established that the business units offered tremendous benefits to students, teaching staff, the institutions and the general public as a whole. For staff and students, such establishments offer a door-step facility for hands-on training. Primarily the institutions see these establishments as great opportunities for income generation to enable them cater for their ever-increasing costs. To the general public, staff and students, the units become an avenue for the supply of goods and

services at reasonably low prices. The researchers discovered that market for goods and services of the production units were numerous but unfortunately, the operators lacked the capacity to exploit these markets. Mainly it was realized that the production units investigated had greater opportunities for income generation owing to an already existing market (students, staff and related groups within their envious). Moreover, there was opportunity on daily basis to render services to the University community and its environs but these were not exploited. The inability to seize these opportunities was laid partly at the doorstep of the challenges confronting the production units. The challenges encountered included: obtaining space for operation and expansion projects; challenges relating to provision of modern machinery and equipment making it difficult to execute contracts on schedules; challenge of boosting staff morale and motivation for work. The others are: challenges associated with recruiting adequate and highly skilled personnel; challenges of staff ignorance on business procedures and processes; and finally, persistent interferences in the activities of the unit by departmental staff and the central administration.

It becomes obvious that there is need for immediate addressing of these challenges to make the production units truly business oriented ventures. Approaching the units as true business enterprises with added responsibility for students' training would therefore bring much rewards to the institutions and the Fashion and Textiles Departments within these Technical Universities.

3.8 Conceptual Model of School-Based Enterprise

The conceptual model of SBE to run as part of the HND Fashion and Textiles programme was developed following the outcome of research in determining approaches to CBT business education. The model comprises a curriculum plan, a business plan and guidelines for implementation and operation of the proposed SBE as depicted in figure five (5).

Figure 5: The Conceptual Model

The model is a School-Based Enterprise Curriculum and Business Plan. The curriculum plan seeks to integrate an SBE curriculum into HND CBT Fashion and Textiles to help students connect core academic courses to SBE technical and business skills development. The curriculum plan was developed taking a cue from a simplified model of curriculum development by Rajasekar (n.d.) (Professor of Education at Annamali University) using the systems approach. According to Rajaseker (n.d.), the various systems approach stages are as follows: Consider the characteristics of the target population and the subject matter; 2. Gauge the learners' current ability and knowledge in the area; 3. Formulate learning objectives and results; 4. Choose effective teaching strategies; 5. Run the course or curriculum; and 6. Assess and evaluate. Figure six (6) presents diagrammatic representation of the curriculum plan.

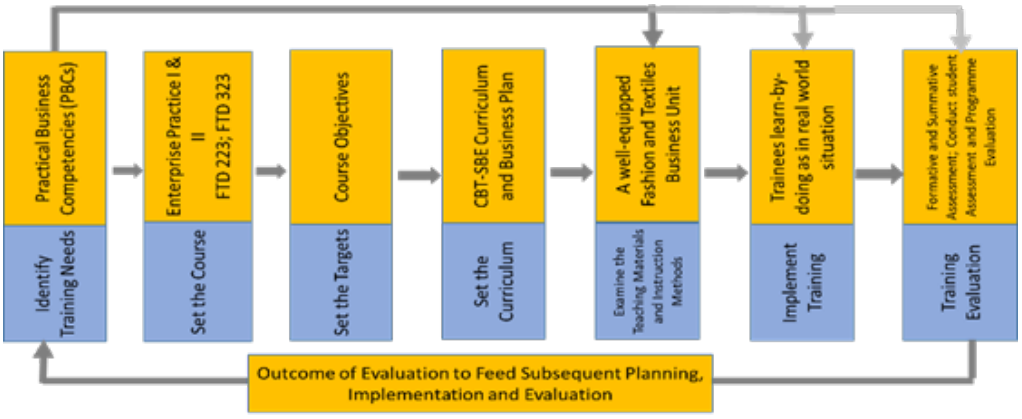

Figure 6: Curriculum Plan, Implementation & Evaluation. Training Cycle (Adopted from JICA 2008 Training in Vocational Education)

The diagram is based on a cycle termed the P-D-C cycle, which simply means, Plan-Do-Check. That is Plan, Implement (Do/Execute) and Evaluate (Check) after which feedback is used to improve subsequent programme of activities. Details of the SBE Curriculum Plan are presented in Table three (3).

S/N	Learning Outcome	Teaching/Learning Activities	Kind of learning to be assessed	Assessment/Assessment Mode
1	Student displays market research skills pertaining to fashion and textiles industry	Fieldwork, Educational visits	Research skills, Inquiry skills	Written reports, Oral presentations
2	Student develops skills required for product planning, production and service delivery	Workshop practice, laboratory work, Clinical work	Technical skills, Professional skills	Practical assessment, Portfolio
3	Student develops effective employer/employee communication, and appropriate customer relation responses in a business situation through their encounters with real customers.	Seminars, Peer group presentation	Communication skills, Interactive response ability	Presentation, Interviewing
4	Student demonstrates management and leadership skills on the job.	Role plays, Coaching, Experience sharing,	Professional skills, Managerial skills, Leadership skills, Creativity	Clinical practice, Interviewing, Written reports

5	Student performs basic purchasing, pricing, promotion, selling, distribution, cashiering and book-keeping	Clinical work, Role plays	Professional skills,	Clinical practice
6	Student displays capacity to value and participate in projects which require teamwork	Case studies, Group projects, Group assignments, Peer group presentations	Relationship building, Teamwork, Tolerance	Presentation Project report
7	Student manages competing demands on time, including self-directed learning	Case studies, Seminars, Experience sharing, Coaching	Planning & Time Management, Skills needed in real life	Interviewing, Clinical practice
8	Student demonstrates job readiness skills for fashion and textiles businesses	Role plays, Coaching, Experience sharing,	Technical skills, Professional skills	Interviewing, Practical assessment, Portfolio

Table three (3): Learning Outcomes with corresponding Teaching/Learning Activities and Assessment Methods

(Source: Table Designed by Researchers)

The content in Table 3 is based on the field research conducted. The assessment methods were adopted from the piloted HND CBT Fashion and Textiles curriculum (2009) at Accra Technical University and the work of Kennedy (2007). The choice of instructional and assessment methods was geared towards a more practical approach to a combined SBE and HND CBT Fashion and Textiles programme. The teaching and learning methodologies outlined are adult learning methods that are practice based. These methodologies would ensure that students 'learn-by-doing' to facilitate their job readiness skills. The findings presented above confirm the effectiveness of the teaching and learning methods proposed. The corresponding students' assessments methods are also practice-based to test for specific competencies which are clear departure from the lengthy writings associated with theoretical examinations (Boahin & Hofman, 2010). The curriculum plan proposes two courses; Enterprise Practice One and Enterprise Practice Two to cater for the management, business and entrepreneurial skills courses in the curriculum.

The business plan is a professional one that meets all professional standards. It was developed such that on its own it can be implemented as a sole commercial enterprise. Crafting the business plan took into account the differences between a School-Based Enterprise and starting a commercial business. What makes the SBE Business Plan unique are considerations related to curriculum (using the business as platform for students' training so that students earn credits while 'learn-by-doing'). Essentially the business will not be driven by purely profit motives but knowledge and skill transfer that participating students will take to their future jobs. Laying this foundation is important since the research is aimed at confidently proposing that: participation in an SBE will produce better students' outcomes in fashion and textiles vocations (as far as Practical Business Competencies are concerned) than if the same students were not offered the programme. This is the crux of the study. This guidelines for implementation and operation of the SBE serves as the SBE's Policy Manual. The rationale is to communicate to student workers the SBE's procedures, rules, expectation, goals and philosophy. It is to ensure that the SBE is run smoothly and consistently. In the absence of a business manual, orienting new students and repeatedly going over procedures with existing pupils would take a lot of time. Every time a problem is misinterpreted, a privilege is misused, or a policy is altered, a lot of time would also be spent evaluating or explaining.

The outcomes of the case studies with two year groups of HND Fashion and Textiles students at Kumasi Technical University have clear relationships with the proposed model. Relatability is entirely possible, and the model would present better student outcomes than even the semester case study projects with HND One and Three students. These inferences are based on the supposition put out by Bell (1999), who stated that generalization may be unlikely in a 100-hour effort but relatability may be fully conceivable. Small-scale studies that have been carefully prepared may help to guide, clarify, and inform institutional policy decisions. They are thus quite useful. While there is no need to apologize for not being able to generalize, it would be imperative to do so if data were distorted in an effort to demonstrate more than was possible (p.172). The model is therefore well crafted to achieve expected learning outcomes stated in the curriculum plan. Though some unavoidable challenges may be encountered during implementation, the proposed intervention (the model) firmly supports the proposition that: 'participation in SBE will produce better student outcomes for fashion and textiles vocations (as far as Practical Business Competencies are concerned) than if the same students were not offered the programme'.

4.0 Conclusions

Approaches to develop PBCs among Fashion and Textiles trainees are diverse. The diverse nature informs careful combination and multi-faceted instruction methods and accompanying delivery systems that are deemed effective at any point in time. Focus is to be placed on interactive approaches and instruction geared towards problem solving. There is wide support for SBEs as Business Training Laboratories for TVET programmes especially Fashion and Textiles. This provides sound basis for institutions to set-up functional, effective and efficient Campus Companies. The benefits of Campus Companies as SBEs are three-fold: platform for Technical Skills Training, Practical Business Training (incubation) and also for Income Generation. An integrated approach of School-Based Enterprise and Competency- Based Training and Learning fashions the school as a mini-workplace. Such a school system encourages problem solving and critical thinking for productive learning.

5.0 Recommendations

To address the mismatch between graduates' skills and competencies and industry expectations, Fashion and Textiles Training Institutions must focus on relational learning; by linking school and the world of business. Periodic review of curricular would also help to meet contemporary business trends. Institutions offering Fashion and Textiles programmes must convert existing Production Units or create new ones to offer both Technical and Practical Business training to students. This makes Production Units have dual functions as facility for students' practical training as well as Mini-workplace to generate income. Fashion and Textiles Training Institutions should operate a hybrid SBE and Industrial Attachment Scheme, since operating SBEs in educational setting are challenging.

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