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The constructivist view on Textile, Apparel and Fashion Education

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ABSTRACT

Sustainable development remains an important global vision and Education for All (EFA) that represents an international commitment to ensure that every individual receives basic education of good quality is based both on a human rights perspective and on the generally held belief that education is central to individual well-being and development. The current textile, apparel and fashion scenario is characterized by complex factors such as reduced time to market and the need to improve the efficiency of business process and offer the client timely, effective and satisfactory services. This necessitates reorganisation by companies, industry oriented research and human resource developmental efforts by the educational institutes to upgrade and adopt suitable measures to meet up the challenges of the changing apparel and fashion industry trends. The Textile and Apparel industry is highly human resource intensive and therefore relies on strong management systems and practices information technology driven operations, branding, marketing and communication, strategic planning of human resources and its effective management. In this article an attempt is made to view the current scenario and the scope of Textile and Apparel education, since Textiles and Apparel is an industry where innovations in education, process as well as product are required to effectively integrate all aspects of design, Technology, Retail and Management. The nature of this study is centered on identifying students' academic expectations and motivations in seeking an advanced education. With the recent trends in academia, such as the introduction, consolidation, up gradation of programs and increasing tuition rate in Textile, Apparel and Fashion Education, this study is both timely and relevant.

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Introduction

Nature is magnificent in its doing and undoing. It is important to realise that what we think of as calamity is actually a part of cosmic power. It may appear tragic and painful, but there is a strong reason and purpose behind it. Nature's equation cannot be perceived by ordinary, peripheral, mundane mind, it has to be through integration of energy and skill. The other side of the coin is the commerce and trade that is very easy to access across the national borders throughout the globe. Thus this has opened up the world market to everyone and has also developed a threat of a very stiff competition from all around the world. Thus, unless one has some unique selling features in the product and services, which is better than the competitors' product or services, one has very little chances of survival.

The current textile and apparel scenario is characterized by complex factors such as reduced time to market and the need to improve the efficiency of business process. Further, the demand to offer the client timely, effective and satisfactory services. This necessitates re-organisation by companies and industry oriented research. Human resource developmental efforts by the educational institutes to upgrade and adopt suitable measures to meet up the challenges of the changing industry trends is essential. The Textile and Apparel industry is highly human resource intensive and therefore relies on strong management systems and practices, information technology driven operations, branding, marketing and

communication, strategic planning of human resources and its effective management

Indian Government is sensitive to the needs of this industry. Major policy initiatives and schemes taken by the ministry of Textiles have been implemented by various for textile integrated parks. It has taken a number of steps for the expansion of Textiles and Clothing sector including the technology and moderation of textile mills under the Technology Up-gradation Fund Scheme, support for industry infrastructure through scheme for integrated textile parks, scheme for skill up-gradation of textile workers under the Integrated Skill development Scheme and other capacity building programmes for the industry like knitwear Technology Mission. It has launched the Integrated skill development Schemes for the Textile and Apparel Sector, including Jute and handicrafts, with an objective for capacity building of institutions providing skill development and training in Textile Sector. Under this scheme, the Government has envisaged skill development of 27 lakhs person with an overall cost of Rs. 2360 crores over the next five years. Under the scheme, the first project of Ministry the Apparel Training Development Centre has been launched for manufacturing of Apparel through Research and training and workforce training programmes.

Literature Review

The choice of an integrated literature review refers to a review that describes and synthesizes the knowledge from diverse sources.

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It is especially appropriate for new subjects where incorporating several theoretical domains is seen as a strategy to developing new conceptual models, research agendas and/or metatheories. (Kohtala, 2014).

The Textiles Sector has the second largest share of employment after agriculture in India. With technological modernization being the key to high industrial growth, labour intensive industries like textiles require not only skilled workforce, but also massive vocational training for skill up gradation of the existing workers engaged in the organized as well as unorganized sectors, including handlooms, power looms, sericulture, wool, Khadi, etc. As per the National Skill Development Council, India, report, the overall employment in the T&C sector would increase from about 33 to 35 million in 2008 to about 60 to 62 million by 2022. This would translate to an incremental human resource requirement of about 25 million persons. Of this the mainstream T&C sector has the potential to employ about 17 million persons incrementally till 2022. It implies that by the end of the XII Plan (2016-17), which is roughly close to 2018, the textile sector's incremental human resource requirement would be about 17.8 million, of which 11.00 million human resources would be required in the Mainstream T&C sector. (ISDS, Ministry Of Textiles, GOI, 2013).

The Indian textile industry has strength across the entire value chain from natural to man-made fiber to apparel to home furnishings. Its share in the nation's GDP is 6% and in exports is 13%. The sector is the second largest employer after agriculture. After the phasing out of export quotas in 2005, India's export performance has been below expectations. Its share of global exports is around 5% whereas it was expected to rise quickly towards China's level. The Chinese share in global exports is 39%. Vietnam and Bangladesh have shown remarkable success. Vietnam could achieve a peak export growth rate of 30% while Bangladesh could achieve a growth rate of 18%.

Taking innovative measures in partnership with the industry and learning from experience, India could aspire to achieve 20% growth in exports over the next decade. In any case the achievement of 15% growth rate in exports should be feasible. In the domestic market, sustaining an annual growth rate of 12% should also not be difficult. This implies that with a 12% CAGR in domestic sales the industry should reach a production level of US\$ 350 billion by 2024-25 from the current level of about US\$ 100 billion for the domestic market. With a 20% CAGR in exports India would be exporting about US\$ 300 billion of textile and apparel by 2024-25 while with the lower 15% CAGR in exports, India would be exporting about US\$ 185 billion of textile and apparel by 2024-25. Considering the targeted growth in exports, India should by then have a market share of 15% to 20% of the global textile and apparel trade from the present level of 5%.

During this period India should also attempt a structural transformation whereby it becomes a net exporter of finished products. This would imply that growth rates in exports of fibre and yarn should start declining and growth rates of apparel, home furnishings, technical textiles and other finished products should grow very rapidly. This would maximise employment generation and value creation within the country and the fulfilment of the Prime Minister's Vision of "Make of India". In the process, investment of about US\$ 180 billion to US\$ 200 billion would take place and about 35 million

additional jobs would get created. (Ministry of Textiles, GOI, 2015).

However, industry experts have started questioning the scope and strength of the Indian textile sector for several reasons, the most important of which is the severe blow suffered by it on account of both internal and external factors. The last couple of months saw worsening turmoil in the financial markets all over the world. It all started in US, but its rumbling brought crash in most of the developed markets. Even developing countries like India and China could not insulate themselves from the mayhem. This shows how effective globalisation is. Sometimes those not connected with the industry directly, can give eye-opener suggestions, which may work miracles. So the first thing is to try to survive under these conditions. Going back to the basics, one needs to be more competitive now than ever before. Attempts to get innovative people as advisers and people who deliver can prove rewarding both to the industry and educational system. The prescription for this is a holistic sense covering all areas like education, research and industry.

The constructivist view primarily concerns a particular way of conceptualizing knowledge and knowledge acquisition (i.e. learning). It is a view of the nature of knowledge and its development, it is based on a certain epistemology (i.e., a theory of knowledge). The constructivist view comes in many variants in science education literature on students' learning. It is based on a number of quite different philosophical perspectives that share a common "constructivist core". Common core standards, interdisciplinary education, and discipline-specific literacy are common international education reforms. The constructive-interpretative language arts pairs (speaking-listening, writing-reading, representing-viewing) and the communication, construction, and persuasion functions of language are central in these movements. The communication progression has application to other international education systems as they address common core standards and curricula in language and science. To nurture responsible student designers, some educators have been attempting to integrate the concept of sustainability into the university curriculum. Educators in the area of apparel and textiles with experience of including sustainability themes into their courses in a higher education. (Duit, 1996).

The contribution of good textile, apparel and fashion education will accelerate design research, since design research has been gaining momentum in recent years, particularly in the field of educational studies. The first and most compelling argument for initiating design research stems from the desire to increase the relevance of research for educational policy and practice. Design research can contribute to more practical relevance. By carefully studying progressive approximations of ideal interventions in their target settings, researchers and practitioners construct increasingly workable and effective interventions, with improved articulation of principles that underpin their impact. If successful in generating findings that are more widely perceived to be relevant and usable, the chances for improving policy are also increased. A second motive for design research relates to scientific ambitions. Alongside directly practical applications and policy implications, design research aims at developing empirically grounded theories through combined study of both the process of learning and the means that support that process. A third motive relates to the aspiration of increasing the robustness of design practice.

Many educational designers energetically approach construction of innovative solutions to emerging educational problems, yet their understanding oftentimes remains implicit in the decisions made and the resulting design. From this perspective, there is a need to extract more explicit learning that can further subsequent design efforts. (DeLong et al., 2016).

Fashion adoption is concerned with how consumers accept a prevailing style during a particular time. Fashion is accepted by the consumers and influences their behaviour in many ways. It is one of the strongest drivers to influence and motivate their intention to buy and adopt new products. Either through advertisement and promotion of brands or through endorsement of celebrities, companies motivate consumers of different socioeconomic backgrounds to follow the new fashion trends and buy their products. Fashion is now becoming a widely recognized fact. Everyday companies are introducing new styles and fashions for the consumers. Fashion awareness is explained by, that it is the response of the individual to the new trends and styles. Several factors in fashion influence people, for example, when a person is impressed by someone then s/he tries to copy that person in terms of style, behaviour and even his/her conversation style. Consumers talk to each other about new trends and styles, exchange information and give suggestions to each other. It means that social communication is the best tool for the diffusion of fashion. Companies are moving towards the era of innovation that can lead them to either success or failure. For example, developing an innovation is not a big deal but to diffuse that in the market is a key element for the company's success. The fashion industry is introducing new fashions every day. It's now a challenge for the fashion industry that, how they can successfully position their products in the minds of the consumers to excel profitably. (Rahman et al., 2014).



Figure 1. Textile and apparel education amalgamation of Science, Technology, Arts, Commerce and Management. Student-teacher involvement and contributions

We cannot ignore the fact that scientific information is widely available to public access through the digital media. However, it is important that technical concepts and theories are understood by students seeking Textile, Apparel and Fashion Education. A student may find difficulties in comprehending certain ideas and this may lead to inability in interpreting the content. In this context a gap is created between the student and the science content. This can turn into a loss of interest in scientific topics and disciplines, diminishing interactions between the student and the educator and less interest in comprehension of course content. In order to avoid this loss of enthusiasm in students, teacher involvement, training and up gradation of teaching skills is essential.

An educator can aid in building the bridge connecting science and students proposed by the didactic transposition. The efforts from a teacher in order to refine scientific information is definitely going to be big and rewarding.

In recent years, faculty in fashion programs have observed a transformation in the aptitudes and attitudes of students applying for and pursuing graduate, post graduate and doctoral degrees and the emergence of a new type of student. This information is valuable for fashion graduate programs nationally as well as internationally, as faculty and administrators develop and refine existing curriculums, policies, and procedures. In order to foster sustainable admittance and retention rates, it is also necessary to respond effectively to the characteristics of the new generation of students, while developing and sustaining best practices for supporting students' goals of completing graduate degrees, student interests should be an integral part in designing graduate curriculums. As part of their postsecondary education, students should be enriched in their thinking, prepared for a variety of careers, and equipped with the skills and abilities that will contribute to their success in a diverse and global workplace. Textile, Apparel and Fashion education must focus on the 'application of knowledge and skills in creative and innovative ways that will help ensure future economic prosperity, influence social growth, and to maintain leadership position in the global economy'. (Kozar, J. 2013).

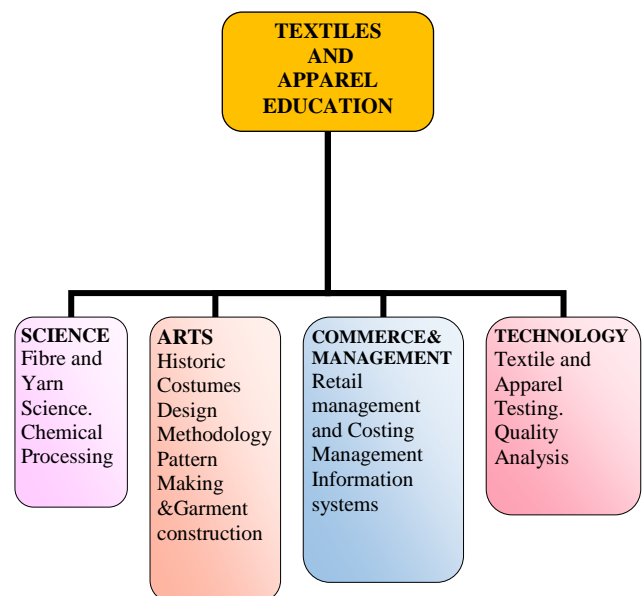


Figure 2. Textiles and Apparel Education a blend of theoretical knowledge with practical skills. Role of Institutes offering Textile, Apparel and Fashion Education

Today, many institutes, university affiliated colleges and polytechnics offer courses related to Textile, Apparel and Home Fashion to award diploma, undergraduate, post graduate diplomas as well as doctoral programmes at all the metros, two and three tier cities in India. This clearly indicates the awareness about the education of Textile and Apparel related courses in various fields like garment, fashion design and merchandising. They are all striving to impart quality education and promote scientific temper. The blend of theoretical knowledge with practical skills is very essential for a meaningful knowledge base for these courses. It is also important to impart awareness and sensitivity towards social responsibilities specially education related to textile.

This is to maximise the utilization of human resources for the achievement of individual and organisational goals. Institutes should provide ample opportunities and comprehensive framework for the development of human resources in an organization for full expression of their talent and manifest potential. This will develop the constructive mind and an overall personality of the students. A sense of team spirit, teamwork and interterm collaborations is very essential for adjustments at the workplace for overall performance and meeting up with the targets. Optimum effectiveness in education can be achieved through organisational health and culture.

Every institute needs to have well-trained and experienced people to perform the activities that have to be done. As jobs have become more complex, the importance of the students training has increased. When jobs were simple, easy to learn, there was little need for the students to upgrade or alter their skills. But the rapid changes taking place in highly sophisticated and complex industry of Textile and Apparel industry have created increased pressures for the institutes to readopt the contents and techniques. The students should have an in-depth knowledge about the manner in which the products are produced and offered, the types of machines used and the type of skills necessary to complete these jobs.

Synergizing training, education and development

Training, education and development are the three terms that synonymously used and very apt for the educational institutes. In all training there is some education and in all education there is some training and it is important to note that the two processes cannot be separated from development. Training is the process of learning a sequence of programmed behaviour. It is the application of knowledge. It gives people an awareness of the rules and procedures to guide their behaviour. It attempts to improve their performance on the job and prepares them for an intended job. Training is the understanding and interpretation of knowledge. It does not provide definite answers, but rather it develops a logical and rational mind that can determine relationships among pertained variables and thereby understand phenomena. Development is a related process. It covers not only those activities that improve job performance but also those that bring about growth of personality, help individual in the progress towards maturity and actualisation of potential capacities so that students become not only good employees but also better men and women. The process of development includes not only skills but also certain mental and personality attitudes. The institutes should expose the students to the latest equipments that are used in the industries.

Education must impart qualities of mind and character and understanding of basic principles and develop the capacities of analysis, synthesis and objectivity. Training refers more to instruction in technical and mechanical operations while development refers to philosophical and theoretical educational concepts. Development involves more managerial personnel. While training imparts specific job related knowledge. Training makes the employees more effective and productive at the work place. It is activity and intimately connected with all the personnel and managerial activities. Training the students moulds them to be better employees' attitudes and help them achieve a better cooperation with the company and greater loyalty. Training at the colleges should elevate the morale of the students since this helps reduce dissatisfaction, complaints, grievances and absenteeism.

Visualizing research scope and performance, bringing strategic insight to research management is very important for the holistic development of the Textile, Apparel and Home textiles community. Today's academic institutions are continuously looking for ways to improve their standing as world-class research bodies. Gaining a leadership position in research helps institutions recruit and maintain high-quality research staff. The mandate is to identify specific areas of research excellence, and emerging strengths, to use as a benchmark of performance among other institutions. Identify new research opportunities, by displaying areas of expertise in a multidisciplinary view. Review competitive standing, by benchmarking performance against major competitors for each area of research. Search for collaborators, by determining potential sources for research collaboration for providing solutions for industry and also funds for research. This process will benefit the student community as well as the industry and complete the cycle towards progress.

Conclusion

One of the basic needs of mankind is clothing. The art of clothing dates back to centuries. man's first article of clothing and furnishing was animal skin wraps, sometimes-stitched together using bone needles and animal sinews. He soon attempted to manipulate fibrous materials into textiles fabrics through the experience gained by interlacing branches, leaves and grasses in the production of primitive shelter. The textile and apparel has evolved from that stage to a highly specialised and sophisticated field in raw material, garment, fashion design and marketing. The rapidly changing culture, politics and economics of modern life deeply affect the industrial environment, especially technology and consumer driven industries such as textiles and apparel.

The textile and apparel education is an amalgamation of science, arts, commerce, management and technology (figure 1). It ranges from study and innovations in area of fibres, yarns, fabrics, machinery, design, market, and consumer. This multi-disciplinary subject that covers areas as diverse as Applied Management, Textile Design, Colour, Trend Forecasting, Retail Management, Fashion Merchandising, Supply Chain Management, CAD, Digital Design, Consumer Behaviour, Internet Shopping, Retail Marketing, Product Development, Enterprise and Innovation in Textiles for Apparel and Interiors (Figure 2). There is a tremendous opportunity in upcoming fields for research and product development in nanotechnology and technical textiles. The period between 2010 and 2030 will be crucial for technical textile sector in India and will provide ample opportunities for both international and domestic players with a growth rate of 15% per annum. India can rise and move, with opportunities in every sector because of its population, diversity and multicultural creativity. The educational institutes must make a meaningful effort to provide the best possible environment, training and guidance to nurture and nourish the young creative minds that are the future of the nation.

Human resource development at institutional level is organisational manpower planning, training, performance appraisal, development, potential appraisal, and organisational development. Its involvement in all areas is with an objective to develop certain new capabilities in people concerned to help them perform job in a better way and to accept future job challenges. At the national level human resource development is covered with the people's development for nations well being.

It takes the wealth, capabilities, skill, at times of people, which are more useful to the development among them and nation's overall development as well.

This paper is valuable to faculty from university, colleges, polytechnic as well as administrators involved in formulation and revision of curriculum and update educational systems at various levels of training. They predominately represent the innovators and contribute to education by understanding differences in personality characteristics, perceptions of educational outcomes and work ethic. Fashion-related programs can use this information to recruit and enroll talented students. There is a need to accelerate and sustain growth of Textile, Apparel and Home fashion industry, through timely policies for enhancing investments, rapid improvement in infrastructure and making the growth process more inclusive. Assuring the priority that it deserves and directing attention to education and training in the Textiles and Apparel is in the interest of the economy of the textile industry, including rural dimensions. This will certainly promote brand image of Indian Textiles for clothing as well as interiors.

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