

EDUCATIONAL TECHNOLOGY AS A TOOL FOR ENTREPRENEURSHIP AND SELF-RELIANCE

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Abstract

This paper defined educational Technology and entrepreneurship, it also explains the Characteristics of Entrepreneurship and Entrepreneur, behavioral role of entrepreneurs as categorized by different researchers , it also explains Entrepreneurial opportunities that are inherit in printing Technology. Furthermore the paper describes on the possible areas of job creation in the field of educational technology and highlighted some of the Major considerations for setting up a photography studio in educational technology. Finally the paper suggested for the exploration on the educational technology on entrepreneurship skills through empirical evidence.

Keywords; Educational technology, Entrepreneurship and Self-reliance.

Introduction

Advancements in Technology have brought so many changes in life especially the electronics facilities to the forefront as the most radical tools of globalization and development which have affected human lives positively. The introduction of Information and Communication Technology (ICT) to learning process has given direction to improving the advanced learning environment and the process of knowledge acquisition and dissemination at all levels of education. In recent years the phenomenon of teaching educational technology has attracted the interest of researchers and policy makers that recognized its positive effect on economic development. Educational technology is a complex integrated process involving people, procedures, ideas, devices and organisations for analysing problems and devising, implementing, evaluating and managing solutions to those problems involved in all aspects of human learning' (kumar, 2008). More over salawu (2011) sees educational Technology as a systematic way of designing, carrying out and evaluating the total process of learning in terms of specific objectives based on research on human and non-human resources to bring about more effective instruction.

Ema and Ajayi (2011) also sees it as the principle and method which bring together men and resources in a systematic cooperation in a bid to effectively resolve educational problems. Moreover, educational technology is a systematic organization of men, machines, ideas and procedures in designing, implementing and evaluating the teaching and learning process in a bid to provide effective learning (Abifarin, 2015).

Educational technology has meant different things to different people. While some scholars refers it as the technical equipment and media of education (i.e. computers, overhead, slide, film, filmstrip and opaque projectors, television e.t.c).Entrepreneurship is one of the four mainstream factors of production, land, labour, capital and entrepreneurship(Eneji, 2014). Entrepreneurship is generally defined as the creation of new enterprise, or the process of extracting profits from new, unique, and valuable combinations of resources in an uncertain and ambiguous environment (Low and MacMillan, 1988). It is, moreover, considered as a great force of economic activity that contributes to the positive growth of various economic indices and economic development in general (Szabo and Herman, 2012).Furthermore, entrepreneurship is critical, in order to exploit the potentials of innovative technology (Warneryd, 1988, Rogers & Larsen 1984).

Eneji (2014) also sees entrepreneurship as a dynamic process of creating incremental wealth. This wealth is created by individuals who assume the major risk in terms of equity, time and or career commitment of providing value for some product or service.

Self-reliance is defined as a state of mind that regards one's own mental and material resources as the primary stock to draw on in the pursuit of one's objectives and finds emotional fulfillment not only in achieving the objectives primarily by using own resources (Charles, 2003). The acquisition of educational technology skills is mandatory for proper intellectual development and self-reliance, to this end, importance must be attached to the study of educational technology because of its usefulness to the individual as well as society in general. As such it has become imperative to explore divers means of survival, which educational technology can offer cum entrepreneurship.

Characteristics of Entrepreneurship and Entrepreneurs

Entrepreneur is the agent “ who unite all means of production and finds in the value of the productions the reestablishment of the entire capital he employs and the value of the wages, the interest and rent which he pays, as well as profits belongs to himself” (opara ,2010).

Florida, (2013) conceives the entrepreneur as the innovator who implements change within market through the carrying out of new combination such as introduction of new techniques of productions reorganization of an industry and innovation. He further argues that the entrepreneur is an innovator, one that introduce new technologies into the work place or market, in creating efficiency, productivity or generating new products or service. Entrepreneur is a starter. An entrepreneur is an initiator, a challenger and a driver. Someone that creates something new, an initiative, a business or a company. He or she is the beginning (and sometimes the end of the venture, project or activity).

Based on the interaction with the business environment, various types of entrepreneur can emerge. To this effect, Becuman, (2012) identifies the four types of entrepreneur as innovative, imitating, Fabian and Drone:

Innovative: this types of entrepreneur is preoccupied with introducing something new in to the market, organization or nation, they are interested in innovations and invest substantially in research and development.

Imitating: this is also referred to as ‘copy cats’. It observe an existing system and replicate it in a better manner. They could improve on an existing product, production process, technology product, production process, technology and through their vision create something similar but better. This is the case of the students becoming better than the master.

Fabian: these are entrepreneurs that are very careful and cautious in adopting any changes. Apart from this, they are lazy and shy away from innovations.

Drone: These are entrepreneurs that are resistant to change. They are considered as old school? They prefer to stick to their traditional or orthodox methods of production and systems.

Entrepreneurs occupy three roles, namely as agent of (a) economic change (b) social change and (c) technological change. These are referred to as behavioral roles.

Characteristics of Entrepreneurship

1. **Creative Activity:** Entrepreneurship entails innovations. It deals with product innovation, production techniques innovation while bearing in mind the market.
2. **Dynamic process:** Entrepreneurship is a dynamic process that has to bear in mind the dynamic business environment.
3. **Purposeful activity:** Entrepreneurship is an activity embarked upon for a specific purpose. This could be for profit making purposes, for humanitarian purposes or to bring a difference to the market.
4. **Self-confidence:** Entrepreneurs are confident in terms of their business activity, this is not to say entrepreneurs never have self – doubt, but they are able to overcome it and believe they can achieve their goal.
5. **Resourceful and problem solvers:** lack of assets, knowledge, and resource are common, but entrepreneurs are able to get what they need or figure out how to use what they have got. They never let problems and challenges get in the way, and instead find ways to achieve their goals despite hardships.
6. **Optimism:** it’s difficult to succeed at anything if you don’t believe in a good outcome. Entrepreneurs are dreamers and believers their ideas are possible, even when they seem unattainable.

Entrepreneurial Opportunities in Printing Technology

Entrepreneurial opportunities refer to those situations in which new goods services, and organizing methods, can be introduced and sold at greater than their cost of production.

On the other hand, business opportunities are possibilities to create and deliver value to stakeholders in prospective ventures.

However Parker (2015) defines entrepreneurial opportunities as feasible and profit seeking endeavors, this simplicity allowing for ventures to fail, as long as the ventures is feasible which means that it can generally be executed as long as it is profit seeking yet not necessarily profit making. Entrepreneurial opportunities are more accurately described as an opportunity to engage in entrepreneurial action, in which entrepreneurial denotes a sub-class of some broader category human action. Printing Technology refers to a process for production of texts and images, typically with ink on papers or any other material using a printing press or any other printing process. For every newspaper, book, or other printed product, there is a production crew laboring behind the scenes, from various ways for printing. As a printing technology major, you will learn the skills necessary to play, prepare, and complete print jobs, from assembling film to operating printing or any other source for printing to cutting and collating the finished product.

Entrepreneurial opportunities that are inherent in printing technology are stated below: Screen printing, digital printing, Flexo printing, Gravure printing and Inkjet printing.

1. **Screen printing:** It is one of the major printing processes used these days for a wide range of printing jobs the artist for their creative works used early silk screen printing. It is also known as porus printing. Now a day silk is not only the fabric used. Nylon, Dacron, polyester is also being used. This process is based on the fundamental fact that by forcing ink through the pores of selected areas of silk screen, images can be formed on the substrate placed, below the screen. The selected porus areas on the printing surface are the images areas while the blocked areas on it are the non-image areas. By using this process, printing can be done on rubber, plastic, paper, glass e.t.c., the image can be transferred to almost any surface whether flat or odd shaped. The process is very simple and cost effective and is best suited for package, display printed with a good quality better than letter press. Picture can also be printed to a certain extent. All the material required for printing by the process is simple, inexpensive and easy to handle.

All of the above mentioned points show that screen printing is very significant entrepreneurial opportunity.

2. **Digital Printing:** this is probably the most popular printing method since its introduction. Digital printing is very effective since it reduces the time to complete the printing process. It does not need films and plates anymore. What it does is to transfer the digital file directly to the printing press with the help of a computer. It's relatively fast that costumers often rely on digital printing to meet deadlines and schedules.

Digital printing is actually among the best printing process that provides entrepreneurial opportunity in the field of educational technology.

3. **Flexo printing:** This printing process can be used on several materials or object for printing which includes, printing on plastic foil, acetate film, brown paper, and other material used in packaging, Flexo printing is also known as flex graphic printing or

- flexo. Some typical application plastic bags, milk cartons, disposable cups, and candy bar wrappers. Flex printing may also be used for envelopes, labels and newspaper. Flexo printing is very essential that provide entrepreneurial opportunity.
4. **Gravure printing:** This is another entrepreneurial opportunity in the field of educational technology in which an image is etched on the surface of a metal plate, the etched area is filled with ink, and then the plate is rotated on a cylinder that transfer the image to the paper or other material. Like flexo printing, gravure printing is often used for high-volume printing of packaging wall paper, and gift wrap using fast-drying inks. Although less common, gravure printing may also be used for printing magazine, greeting cards, and high-volume advertising pieces. Gravure printing is commonly used for labels and packaging competing against flexo printing.
 5. **Inkjet printing:** The fifth entrepreneurial opportunity is inkjet printing. A piezo drive inkjet has been widely applied to technology in a variety of inkjet methods because of its excellent compatibility with functional inks. Inkjet printer display products have been available on the market. Inkjet technology, which has been around for many years, and its mechanism of droplet ejection are well understood. Inkjet printing is one of the important printing processes that provide technological opportunity.

Possible Areas of Job Creation in the Field of Educational Technology

There are several areas and possibilities where educational technology could create job opportunities. They include;

1. **Digital Jobs:** the ICT industry has directly created millions of jobs in the advanced and emerging economics. For many and different countries, for example, the ICT sector employment recorded high percent of total business sector employment. The spillover effects of the industry are also significant. Various studies that digital jobs generate between two and four times the employment in other sectors of the economy, these jobs also often pay higher than average wages and see them grow faster than other sector's.
2. **Printing Technology:** this refers to a process for production of texts and images, typically with ink on papers or any other material using a printing press or any other printing process. For every newspaper, book, or other printed product, there is a production crew laboring behind the scenes, from various ways for printing.

As a printing technology major, you will learn the skills necessary to play prepare, and complete print jobs, from assembling film to operating printing or any other source for printing to cutting and collating the finished product.

3. **Photographic Studio:** A photography studio is a workplace to take, develop, print and duplicate photographs. Photographic training and the display of finished photographic may also be accommodating in a photo graphic studio. The studios may have a dark room, storage space, a studio proper where photographs are taken, a display room and a space for other related work.

A photography studio is often a business owned and represented by one or more photographers, possibly accompanied by assistant and pupils who create and sell own and sometimes other photographs. The following are major facilities to be considered when setting up a photography studio:

- a. **Camera:** Choosing the right camera might seem daunting regular point and click cameras may work for a novice, but to make a living from your camera use a Single Lens Reflex (SLR) camera. An SLR allows the operator to capture exactly what he/she sees in the view finder, everyone seems to have an opinion on which brand is best, and if you ask professional, you will hear several brands mentioned.
 - b. **Lenses:** Interchangeable lens SLR cameras allow for changing lenses. The type of work you want to do dictates what kind of lens you will need. Telephoto or some lenses which bring distant objects in focus are a must for sports, wildlife or adventure photography. Wide angle lenses which allow for capturing a wide expense are helpful for landscape photography or taking team or clear photo. Mid-range lenses are used for portraiture. Specialty lenses, such as fish-eye, extreme telephoto, image stabilizing and high vision may also be something your business needs.
 - c. **Lighting:** Every photography business will at times require artificial lighting but the sources vary widely. If you are taking photos at night or in dark venues you may need or require a remote firing flash. If you work in a studio, you will require a stationary lighting system. An indoor event may call for a different colour flash.
 - d. **Processing system:** Next to the camera, probably the most important item in a photography business is the processing system. Basically, you have to get the picture from your camera to the display medium usually film or the internet and this require a processing system. If you use a film camera, you need a darkroom to develop the film. If you use digital camera, you need a computer with a photo-editing program and photo quality printer. The type of photography you specialize in dictates the type of computer to be used, programs and printer you select. Program ranges from what comes prepackaged on many computers to high- priced deluxe product. Photo printers come in several sizes and qualities.
 - e. **Tripod:** For just about any kind of photography studio, sports, portrait, art you need a tripod to keep your camera steady. Tripods range in size from a few inches tall to 6 feet tall and from a few dollars to several hundred. They can light, weight, backpack portable a heavy duty weather resistant. Purchase according to what is best for your use and budget.
 - f. **Sundry equipment:** You may need special equipment; a remote control, to trigger the shutter without causing the camera to shake, during timed exposures, an underwater adapter, to photograph of aquatic wildlife; background cloth and a stool, if you want to take photograph in a studio; lens filters, if you need to compensate for conditions beyond your control.
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- g. **Fans:** All of this lighting and equipment will produce a lot of heat. Take into account the fact that you want all of the outside light sources blocked, and you are probably not going to be in a well-ventilated area. Have at least five fans blowing away from your subject and dissipating the heat as best is use to create dramatic effects with fabrics, clothing and hair.
 - h. **White Balance Card (WBC) and colour palette:** The white balance card (WBC) will have several shades of white as well as a black and white checker patterns so you can adjust your camera settings to the lighting, as well as adjust proper focus settings. The colour palette is used in conjunction with the light meter to create the desired coloured lighting in the studio.
 - i. **Photography center:** This refers to the workplace where a photographer can used in order to keep the equipment saved. The room should be bare and white. Ideally, the floor should be concrete and painted with an industrial white paint. Avoid carpet, floor padding, or rugs; much of the equipment is electrical, and this could cause a fire hazard.
 - j. **Ladders handy:** A photographer will need ladders to hang back drops from high trusses, and to mount lights on the trusses as well. If your lighting tripods are not tall enough to get the lighting you desire, you may have to set the lighting tripod on a stage to give extra light, and you need a ladder to be able to adjust the lights. It is much more convenient having a ladder permanently stationed at each lighting tripod, rather than heavy to move the ladder back and forth between the lights. This will annoy clients, models, hair stylist, make-up artists etc.
4. **Education Sector:** This is one of the vital aspect of job creation in the field of educational technology, there is every tendency of training various people as a teacher, lecturer, researcher, or an expert/resource person in their subject matter and certified or reward them, also in the area of instructional media design, which can be used to employ them in educational sector to serve different functions.
5. **Vocational job:** Educational Technology as a field that concern with both practical and theoretical knowledge, help in the application of both theoretical and practical experience in to a locally business like carpentry, black smith, tailoring, dying, volcanizing etc. may give huge amount of income so as to be self-reliance.

Conclusion

Educational Technology is an area of discipline which involves evaluating and managing solutions to those problems concerned in all aspects of human life. It has always been seen as a bed rock to national development. The knowledge and skills of educational Technology is of great significant to human lives. It provides so many possible areas of job creation and entrepreneurial opportunities which encourage and enhance self-reliance to many people in the Society.

Suggestions

Based on the above discussion, the following suggestions were made:

1. Further research shall involve empirical evidence on how technology could serve as a tool for entrepreneurship for self-reliance.
2. Students should apply the knowledge and Technological skills acquired in to entrepreneurial activities to generate income for their survival in the society.

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