

**WEB DESIGN AND BUSINESS EDUCATION CURRICULUM: AN INNOVATIVE  
PERSPECTIVE**

**BY**

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## **Abstract**

*This paper titled web design and business education curriculum: an innovative perspective. The researcher formulated two objectives and two hypotheses for the paper, among others are determine the relevance of web design in business education curriculum at federal college of education, Zaria, while the hypotheses is there is no significant difference between web design and business education curriculum at federal college of education, Zaria. The researcher reviewed some literatures on web design. The paper utilized descriptive survey design and the population of the paper was 500 NCE students which consists of 350 NCE II and 150 NCE III. The sample size was 100 which is in line with Odukunle (2005) who recommended 20% when the population is less than 2500. The findings of the result revealed that, the relevance of web design in business education curriculum at federal college education, Zaria is acceptable. Based on the conclusion the paper recommended that, it is imperative that federal college of education and universities should provide requisite new technologies for effective instructional task management for business education.*

**Keywords:** Web-Design, Business Education, Curriculum and Innovative

## **Introduction**

Business education is a component of vocational technical education programme that prepare an individual for innovative career in business and also to be an intelligent consumer of economic goods and services. Business education provides students with the needed competencies, skills, knowledge, understanding and attitudes to perform as workers in industries, civil service and also as proprietors of business. Business education is work-focused, skill-based, resultoriented and technology-based (Ugwoke, 2011).

Innovation is the only constant factor in life. This characterizes the dynamism in the competitive business environment like web design. Education is seen as a document per excellence in preparing citizens for effective roles in the society. One form of education that equips its recipients to adapt to the changing world of work is business education. According to the American Vocational Association (AVA) in Osuala (2009), business education is a programme of instruction which consists of two parts: (a) Office Education; a vocational education programme for office careers through initial, refresher and upgrading education leading to employability and advancement in office occupation, and (b) General Business Education; a programme to provide students with information and competencies which are needed by all in managing personal and business affairs and in using the services of the business world. For Business Education programmes to remain relevant in providing the needs of individuals and that of the society; they must embrace current trends (new technologies) in the academic and economic demands of the society.

Business education programme was created along side with vocational and technical education department in universities and federal colleges of education in Nigeria. Business education prepares students mind towards self innovation, creativity for self reliance in the

business world today. This paper seeks to introduce the emerging needs of today's office work into business education curriculum which is the web design. Teaching students of business education web design will create innovation ideas in to their mind which will provide job opportunities within and outside the schools.

Thus, every business organization, institution, companies and so on, needs web design to facilitate their business outlook in the world of business. Therefore introducing web design into business education curriculum will add skills and man power development to students of business education at large. Course description into business education curriculum consist of web page design internet business foundations, networking technology foundations is the second level of web page design concentration, and it prepares students with work-related skills for advancement into industry work. Course content includes exposure to basic and advanced web design, pixilated and vector-based web graphics, web animations, dynamics of web hosting, and web design in eCommerce. The course content provides students the opportunity to acquire fundamental skills in both theory and practical application of web design and of leadership and interpersonal skill development. Laboratory facilities and experiences simulate those found in the web page design and web page construction industry. (McCallie, 2007).

The term curriculum has been associated with academic study and training in higher education since its appearance in "vernacular" English in the sixteenth century. At several point in its history, the term not only defined an identifiable course or plan of study in an educational context, it also referred to the corollary body of scholars engaged in that course work. As such, curriculum refers to both an individual and collective learning experience which web design is not left out (Alaba, 2011). The national demographic of education has shifted and the curriculum in tertiary institution has responded to and reflected changing political, socio-

economic and cultural dynamics. Growing recognition has also fostered curriculum adaptation, innovation and evolution. All these development have changed expectations for business education in Nigeria at large. However, infusing web design into business education curriculum is not the main issue here but the problem is the skilled lecturers that will handled the course in the department level, government supporting in curriculum update with current issues in the office environment today was the necessitating factor on the researcher to investigate web design and business education curriculum: an innovative perspective.

### **Objective of the Paper**

The major objective of this paper is web design and business education curriculum: an innovative perspective, while the specific objectives are as follows:

1. Determine the relevance of web design in business education curriculum at federal college of education, Zaria.
2. Examine the uses of web design as a sustainable development in business education curriculum at federal college of education, Zaria.

### **Research Hypotheses**

Answering the research objective the following hypotheses was drawn:

H<sub>01</sub>; There is no significant difference between web design and business education curriculum at federal college of education, Zaria.

H<sub>02</sub>; There is no significant difference between web design and sustainable development in business education curriculum at federal college of education, Zaria.

## **Review of Related Literature**

### **Concept of Web Design**

According to web design definition (2013), Web design is the process of creating websites. It encompasses several different aspects, including web page layout, content production, and graphic design. While the terms web design and web development are often used interchangeably, web design is technically a subset of the broader category of web development. Websites are created using a markup language called HTML. Web designers build web pages using HTML tags that define the content and metadata of each page. The layout and appearance of the elements within a webpage are typically defined using CSS, or cascading style sheets. Therefore, most websites include a combination of HTML and CSS that defines how each page will appear in a browser. Some web designers prefer to hand code pages (typing HTML and CSS from scratch), while others use a "WYSIWYG" editor like Adobe Dreamweaver. This type of editor provides a visual interface for designing the webpage layout and the software automatically generates the corresponding HTML and CSS code. Another popular way to design websites is with a content management system like WordPress or Joomla. These services provide different website templates that can be used as a starting point for a new website. Webmasters can then add content and customize the layout using a web-based interface. While HTML and CSS are used to design the look and feel of a website, images must be created separately. Therefore, graphic design may overlap with web design, since graphic designers often create images for use on the Web. Some graphics programs like Adobe Photoshop even include a "Save for Web..." option that provides an easy way to export images in a format optimized for web publishing.

## **Emerging Needs to be infused into Business Education Curricula**

Contemporary business education curricula have been suggested greatly by modern technological developments (new innovation and technologies). courses in Business Education Department suggested in this paper include:

BES & BEA 321 Web Design

BES 322 Basic Word Processing/Format Typewriting I &II

BES & BEA 323 Business Communications

BES & BEA 324 Introductions to Computer Networking Packages

BES & BEA 325 Online Publication packages

BES 326 Data Processing and Management Information I & II

BES 327 Intermediate Word Processing I & II

BES 328 Office Information Systems

BES 329 Business Machine

BES & BEA 310 Basic Computer Maintenance and Engineering

BES 311 Secretarial Procedures

BES 312 Advanced Word Processing I & II

BES 313 Computer Appreciations & Application Packages

BES 314 Computer Programming I & II

BES 315 Applied Word Processing

**Source:** *Innovation suggested in Business Education Dept. School of Voc & Tech Education Federal College of Education, Zaria (2017).*

The suggested courses for business education students will help in sustainable development within and outside the campus, and also meet with today's office needs in the society.

## **Usability of Web Design**

As mentioned earlier, the number of people relying on the WWW in their work is rising. Naturally, visitors expect to find useful sites to do business as fast and as comfortably as possible; therefore, usability, which is defined as the visitor's ability to use the site appropriately, is very important. Unfortunately, there are numerous websites with mistakes against usability, since they are partly unusable for the average user. The most common mistakes against usability can be found in Nielsen (2003). A user investigation in 2004 ("Web usability - the main rules", 2004 ) shows that about 40% of users never come back to a website after their first unsuccessful attempt. The most common reasons for their disappointment with websites can also be found in this investigation. According to Powell (2000), the main web design aspects are purpose, web content, visual elements, and technologies. The basic principle of good web design is a balance between these four aspects, and the designer-to-user correspondence. However, a lot of websites are created without a previously defined purpose. Usually the only motive for their creation is just a reaction to the competition's website. On the other hand, sites with no balance between their function and form can be found on the Web every day. The same source claims the main reasons for this problem are the web designer's inexperience, short deadlines, and the so-called ad-hoc design without adopting any web design models. We believe that these problems occur due to the fact that web design courses are mostly focused on technologies, programs and scripts, as mentioned before.

## **User-oriented Web Design**

One of the worst web designer's mistakes is to create a website without a previous analysis of user needs. Such websites may seem interesting and well designed to their authors, but they are complicated and almost useless for many visitors. Web designers should know that



they are to create sites for users, not to show off their web technology knowledge. Therefore, it is advisable to interview users and make an appropriate selection of their desires, for some of them may be unrealistic. The web designer has to decide if user wishes can be met or not. This is very important since the designer is supposed to have a complete control over the situation at every moment. After its publishing, user opinions on a website should be monitored constantly. (Tanja, 2006).

### **Accessibility**

Another problem to the web designer to deal with is accessibility. The World Wide Web Consortium (W3C) defines a website as accessible if it allows access to people with some kind of disability (W3C, 2005). The importance of accessible web design can be realized by analyzing the number of disabled people worldwide. A report (U.S. Census Bureau, 1997) categorizes 19.6% of the U.S. population as having some sort of disability. A detailed categorization of human disabilities influencing web design can be found in “Introduction to Web Accessibility” (Web Accessibility in Mind, 1998). Another source is the statistic about visually impaired people in the European Union, for example for people in Germany (“Statistics about visually impaired”, 1994). The Web Content Accessibility Guidelines (WCAG) (W3C, 1999) by the W3C was the first major effort to establish instructions for accessible design. This standard consists of fourteen guidelines, each with three checkpoint levels to be reached by web designers. Priority 1 checkpoints ensure that the page itself is accessible. Priority 2 checkpoints ensure that certain groups will be able to access information on the web page. Priority 3 checkpoints ensure that all content on the page is completely accessible (See also the Curriculum for Web Content Accessibility Guidelines (W3C, 2000). It is based on up-to-date architecture and design that allow greater flexibility across the site. Accessibility also contributes to a growing market for

software, hardware, and web design. But, how much is web accessibility respected in practice? The researcher tested the accessibility of 50 websites using WebEXACT, the free online service for testing accessibility of web content (<http://webxact.watchfire.com/>).

### **New Innovation And Business Education Curricula**

The term curriculum has been associated with academic study and training in higher education since its appearance in “vernacular” English in the sixteenth century. At several point in its history, the term not only defined an identifiable course or plan of study in an educational context, it also referred to the corollary body of scholars engaged in that course work. As such, curriculum refers to both an individual and collective learning experience (Alaba, 2012). The national demographic of education has shifted and the curriculum in tertiary institution has responded to and reflected changing political, socio-economic and cultural dynamics. Growing recognition has also fostered curriculum adaptation and evolution. All these development have changed expectations for tertiary education. Curriculum, from its original Latin meaning, means “running a course” or a course which one runs to reach a goal (Ogwu and Oranu, 2006). This means that curriculum involves setting a particular programme that the learner has to pass through to attain a certain level of knowledge in any field of education. Curriculum must be seen as the reconstruction of knowledge and experience, systematic developed with the guidance of the school or relevant agencies which will enhance the learner’s and the society’s well-being (Moronkola, Akinsola and Abe, 2000). Atueyi and Okolo (2005) opined that curriculum is a structured series of intended learning experiences that embrace purpose experiences provided and directed by educational institutions to achieve predetermined objectives.

### 3.1 Research Design

Descriptive survey research design was used for the study. The most common descriptive research method is the survey (Thomas and Nelson, 2001). The method involves systematic collection of data from the entire population or sample through the use of checklist.

### 3.2 Population of the Study

The population of this study consist of students from N.C.E. II and III students of Business Education Department, Federal College of Education, Zaria. The population of this work is 500 respondents. The NCE II students consist of three hundred and fifty (350), while the NCE III consists of one hundred and fifty (150) respondents.

### 3.3 Sample Size and Sampling Procedure

The sample size of the study was 100, respondents this is in line with Odukunle (2005) who recommended that if the population is less than 2500 for descriptive study 20% is enough to establish the existence or non existence of a relationship. In order to get the required sample size, hundred students were randomly selected seventy students (70) from NCE II and thirty (30) NCE III. Due to the foregoing a total of One Hundred (100) respondents shall be the sample of this study.

**Table 3.2 Sample Size and Sampling Procedure**

<b>Name of institution</b>	<b>Respondents</b>	<b>Population</b>
Federal college of education Zaria (Department of business education)	NCE II students NCE III students	70 30
<b>Total</b>		<b>100</b>

**Sources: Departmental record office, 2016**

The researcher used the class list of NCE II and III students to randomly select the students for the sample size of the study in federal college of education Zaria.

#### 4.0 Presentation of Data

**Table 4.1: There is no significant difference between web design and business education curriculum at federal college of education, Zaria.**

Items	SA	A	D	SD	TA	TD	TR	MEAN	S/D	RMK
1	60	20	10	10	80	20	100	6.4	5.25	A
2	62	18	5	15	80	20	100	7.5	4.20	A
3	72	13	10	5	85	15	100	8.75	2.5	A
4	64	11	10	15	75	25	100	11.25	4.78	R
<b>Total</b>	<b>258</b>	<b>62</b>	<b>35</b>	<b>35</b>	<b>320</b>	<b>80</b>	<b>400</b>	<b>33.9</b>	<b>36.73</b>	<b>A</b>

Checklist item number one stated that infusing web design in business education curriculum at federal college of education, Zaria will boost sustainable development. From the respondents, total agreed had 320 scores as against 80 scores for total disagreed. The result showed a mean score of 33.9 responses were accepted.

**Table 4.2: There is no significant difference between web design and sustainable**

**development in business education curriculum at federal college of education, Zaria.**

<b>Items</b>	<b>SA</b>	<b>A</b>	<b>D</b>	<b>SD</b>	<b>TA</b>	<b>TD</b>	<b>TR</b>	<b>MEAN</b>	<b>S/D</b>	<b>RMK.</b>
1	53	32	5	10	85	15	100	37	16.91	A
2	50	20	15	15	70	30	100	41.75	18.94	A
3	20	60	10	10	80	20	100	10	4.08	R
4	25	55	10	10	80	20	100	11.25	2.50	R
<b>Total</b>	<b>148</b>	<b>167</b>	<b>40</b>	<b>45</b>	<b>315</b>	<b>85</b>	<b>400</b>	<b>100</b>	<b>42.43</b>	<b>A</b>

Checklist item number two stated that infusing web design in business education curriculum as emerging needs in today's office works at federal college of education, Zaria will boost sustainable development. From the respondents, total agreed had 315 scores as against 85 scores for total disagreed. The result showed a mean score of 100 responses were rejected.

### **Discussion of Major Findings**

The result of this study revealed that, the relevance of web design in business education curriculum at federal college of education, Zaria is acceptable for students to learn how to create web page for their customers. This was because a total mean score of 33.9 agreed that if web design is infused into business education curriculum will make the students relevant with the speed of technological development in Nigeria. The finding of this study further revealed a significant difference with regards to web design and business education curriculum at federal college of education, Zaria. This was revealed by the calculated t-value of 2.141 greater than the critical t-value of 1.6 which implies that, the difference is statistically significant ( $p=0.005$ ). This finding was in line was Ugwoke (2011) who opined that, another reason for so little emphasis on

web design as a sustainable development in business education curriculum at federal college of education, Zaria will boost the students skills.

## **Conclusion**

Business education curriculum should provide learning experiences that will equip the graduate with requisite competencies in the use of modern office technology such as web design. This paper has revealed that the economy is changing and business education students should be trained to meet the market demands in packages like web design. A good number of courses have been introduced in business education as a reflection of new technological developments and these courses are run by the colleges of education and universities that offer business education programme.

## **Recommendations**

The researcher having identified the impact web design as new technologies in business education curricula, the following recommendations were made:

1. It is imperative that federal college of education and universities should provide requisite new technologies for effective instructional task management for business education.
2. Business educators should be challenged to provide their students with web design for developing requisite skills, knowledge and attitudes to live and work in technologically dynamic environment.
3. Business education curriculum should be flexible in order to meet with these new technological-base courses like computer maintenance and repairs and online publishing.
4. The society is not static; it changes over a time, as a result, curriculum should adapt to these changes as it affects business education such as networking packages.

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