# GAP ANALYSIS AND DEMOGRAPHIC DIFFERENTIATION OF UTILIZATION OF TECHNOLOGY-BASED INSTRUCTIONAL RESOURCES AMONG BUSINESS EDUCATORS

**BY**

**Liadi Hakeem Olaniyi:** Faculty of Education, National Open University of Nigeria, Abuja;
E-mail: holaniyi@noun.edu.ng

**&**

**Prof. V. I. Igbinedion:** Department of Vocational and Technical Education,
Faculty of Education, University of Benin, Benin City, Nigeria;
E-mail: vicidion@gmail.com

## Abstract

*The study determined the gap analysis and demographic differentiation of utilization of technology-based instructional resources (TBIR) among business educators in colleges of education in Edo and Delta States of Nigeria. To guide the study, three hypotheses were formulated and tested at 0.05 level of significance. The study employed a descriptive survey research design. The population of the study was 116 Business educators. A census of Business educators in five purposively selected colleges of education in Edo and Delta States was taken because there is availability of Business education programme, and number of Business educators is of manageable size. A questionnaire title: Gap Analysis and Demographic Differentiation of Utilization of Technology-Based Instructional Resources (GDUTBIRQ) validated by experts was used for data collection. The reliability coefficient of the questionnaire was 0.85. The analysis revealed that there exist skill utilization gap among business educators on various TBIR for teaching. Also, the analysis revealed that there was demographic differentiation with regard to TBIR utilization between the less experienced and experienced business educators, resolved in favour of the less experienced business educators. The study, therefore, recommended among others, that efforts should be made by institutions management to educate Business Educators on the use of TBIR to improve teaching and learning activities through Seminar, workshop and Conference.*

***Keywords: Technology-Based Instructional Resources (TBIR), Business educators, teaching***

## Introduction

Technology has become a credible part of human endeavours in present-day society. A teacher's ability to respond to changes and innovations has become a key factor for instructional success. Business educators do not only need to use technology effectively in their teaching, but they also need to guide and direct the students in using the tools to enhance their learning. By utilization, it means using something especially for practical purposes. The knowledge and skills of the various components of technology-based instructional resources are practically related and knowledge-based to the extent that when fully utilized enables instructors to bring collectively the technology resources that promote effective teaching. Utilization in this context is how often the TBIR is applied by business educators in colleges of education in their instructional delivery for the purpose of benefit maximization. However, it is presumed that utilization of TBIR by business education teachers may depend on their demographic characteristics such as gender, a teaching qualification, working experience, and probably the level of exposure in terms of the training they have received. Demographic variable have been describe as a major factors that may influence or predict the use of TBIR by individual. Among the demographic factors that are

often cited as having an influence on TBIR utilization are gender, income, level of education, skill and age (United Nation Development Programme- UNDP, 2011; Inan and Lowther, 2009).

Technology-based instructional resources are those modern technology based tools for passing knowledge, from teachers to students within the classroom or outside. The use of technology-based instructional resources (TBIR) in teaching Business education courses are expected to provide the Business educators with several tracks through which to retrieve knowledge and foster effective teaching. It is expected of business education teachers to utilize and guide the students to use these media as a source for their learning in ways that are wise, safe, and productive. Meanwhile, Business education teacher, Business educator, and teacher will be used interchangeably. TBIR can impact on the work of business education teachers in a variety of ways, ranging from gaining easy access to information, greater interest in learning, increase retention of information, better presentation of information, to teaching made interactive as well as knowledge sharing made easy (Shahnawaz and Vikas, 2007). It can be added that technology can be of benefit to any teacher, through improved instructional delivery whereby teachers can use technology to meet the individual needs of students. Specific programme application or website gives teachers the option to offer content to the student at different levels, thereby allowing them to access materials at their own pace. The goal of instructional technology is to understand how people learn and how to best design instructional systems and instructional resources to facilitate that learning.

It can be added that TBIR is considered to have influenced teachers in different ways, depending on the circumstances in which each TBIR is utilized to enrich the learning process for the users or learners. Business education teachers can use such tools to create active learning environments that would encourage students to collaborate, or participate in inquiry-based learning (Abdelraheem & Asan, 2006). Educational institutions must recognize that the world has changed. Employers, teachers, and students have needs that our current delivery system is not catering for. New ways must be explored to deliver education to our students through numerous TBIR as well as software application tools with potentials in education. The teachers are expected to make use of such tools or everything provided by the institution. However, if teachers are not aware of the different TBIR available or what they can do, they will not be able to use them optimally. A gap analysis is a process of determining the difference between current knowledge/practice (what we are doing) and current evidence based practice (what we should be doing). Gap can occur in knowledge, skills or practice (Anthony, 2012). Thus, a gap analysis could equally be a needs analysis, but it allows for a more standardized process of determining what the gap-in-knowledge (or need) is. Therefore, determined differences in Business educators' use of TBIR is the effort geared towards increasing the level of knowledge, and skills possessed by business educators to enable them perform effectively towards enhancing proficiency, in meeting the objectives of business education in Colleges of Education in Edo and Delta States, Nigeria.

Meanwhile, this study is hinged on the technology acceptance theories with specific attention to the technology acceptance model by Fred Davis, (1989). **T**he Technology Acceptance Model (TAM) is an information systems theory models propounded by Davis in 1989. This model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, especially, its Perceived usefulness (PU) -

"the degree to which a prospective user believes that using a particular system would enhance his or her job or life performance".
Perceived ease-of-use (PEOU) - "the degree to which a prospective user believes that using a particular system would be free of effort".

**Statement of the Problem**

Application of technology in pedagogical practice by business educators seems to be worrisome, despite the potential for change and improvement to higher education through the application of technology. Yet, colleges of education seem not to have enough requirements for using technology-based instructional resources (TBIR). However from the observation of the researcher, there seems to be no clear evidence of appreciable level of utilization of TBIR for instructional purpose among business educators in Colleges of Education. literature has shown that not much of digital technologies are used in pedagogical practices by business educators in Nigerian colleges of education, thereby placing the students at the disadvantages in the labour market, due to lack of modern day technological skills required of them by the employer of labour. Could it be that business educators are not fully employed Technology-Based Instructional Resources (TBIR) in their instructional delivery to avail the students opportunity in the world of work, though, literature has shown that these resources are in existence but are only gradually taking over in teaching and learning process.

**Purpose of the Study**

The main purpose of this study was to determine gap and demographic level of utilization of technology-based instructional resources among Business Educators in colleges of education in Edo and Delta State. Specifically, the study determines:

1. The skill needs of business educators in the utilization of Technology-based instructional resources (TBIR)for teaching business education courses
2. The difference in the use of TBIR among business educators based on teaching Experience
3. The difference in the use of TBIR among business educators based on academic qualifications

**Hypotheses**

The following null hypotheses were formulated for the study and tested at 0.05 level of Significance.

1. There is no significant difference in the mean responses of business educators between possessed and expected skills level of utilization of TBIR for teaching.
2. There is no significant difference in the mean responses between less experienced and Experienced business educators in their use of TBIR for teaching
3. There is no significant difference in the means responses among holders of First Degree, Master Degree, and Doctoral Degree Business educators in their use of TBIR for teaching.

**Methodology**

The study used Descriptive survey research design. The population of the study comprised 116 Business educators, in the colleges of Education in Edo and Delta States. A census of Business educators in five purposively selected colleges of education was taken because there is availability of Business education programme, and number of Business educators is of

manageable size. A questionnaire title: Gap Analysis and Demographic Differentiation of Utilization of Technology-Based Instructional Resources (GDUTBIRQ), validated by experts was used for data collection. The reliability coefficient of the questionnaire was 0.85. The questionnaire was made up of two sections (A & B). Section A was made up of demographic variables of the respondents such as Gender, educational qualification, and working experience. While, Section B contains 25 questionnaire item statements that relate to utilization of TBIR, each item in section B has a five-point Likert scale response options of Very Highly Utilize (VHU), Highly Utilize (HU), Averagely Utilize (AU), Slightly Utilize (SU) and Not Utilize (NU) for possessed and expected column with 5, 4, 3, 2, and 1 weights respectively. The statistical tools used for data analysis were mean ($\bar{x}$), Standard deviation (SD), t-test, and Analysis of Variance (ANOVA). Mean and Standard deviation were used to answer the research questions while t-test statistic was used to test hypotheses. For research questions 1, Mean and Difference in Skill Utilization Index (DUI) was employed as follows:

(a) The mean (Xp) of the possessed category was determined for each item.

(b) The mean (Xe) of the expected category was determined for each item.

(c) The Skill Utilization Gap (SUG) was determined by finding the difference between the value of the two means each for Utilization. That is (Xe - Xp) = SUG

Where SUG was negative (-), or equal zero it means utilization was not needed,

Where SUG was positive (+), it means utilization was needed for that item.

The remarks for the research questions 2 was based on a weighted aggregate mean of the mean of 3.00 and real limit of the mean value also considered.

**Results and Discussion**

**Table 1**: Mean, Standard Deviation and Mean Difference on the Level of Utilization of TBIR for teaching

| | | Possessed | | Expected | | Gap |
|---|---|---|---|---|---|---|
| **S/N** | **Item Statements** | **Mean** | **SD** | **Mean** | **SD** | **Mean** |
| 16 | Ability to deliver lecture through the internet | 1.66 | .614 | 4.57 | .567 | 2.91 |
| 17 | Ability to create life web conference (web- quest) and build internet into lesson | 1.58 | .613 | 4.47 | .648 | 2.89 |
| 18 | Ability to create a video conferencing for teaching through internet | 1.86 | .648 | 4.46 | .603 | 2.60 |
| 19 | Ability to post classroom news, activities and resources through internet | 1.69 | .633 | 4.37 | .744 | 2.68 |
| 20 | Ability to use internet photos, videos, and websites to enhance printed materials such textbooks | 1.71 | .548 | 4.39 | .639 | 2.68 |
| 21 | Ability to use mobile internet devices to access internet and obtain materials for teaching business subject | 2.56 | .645 | 4.42 | .582 | 1.86 |
| 22 | Ability to use Laptop Computer for teaching | 1.68 | .639 | 4.44 | .645 | 2.76 |
| 23 | Ability to use Digital Camera | 2.46 | .766 | 4.42 | .750 | 1.96 |
| 24 | Ability to deliver/prepare lecture through I-Pod or MP3 Player | 1.64 | .587 | 4.51 | .663 | 2.67 |
| 25 | Ability to exchange e-mail address with colleagues and students on issues relating to business subject | 1.70 | .701 | 4.55 | .536 | 2.85 |

| S/N | Item Statements | Possessed Mean | Possessed SD | Expected Mean | Expected SD | Gap Mean |
|---|---|---|---|---|---|---|
| 26 | Ability to communicate assignment to students through e-mail on issues related to business subject and add attachment to buttress where necessary | 1.79 | .684 | 4.54 | .571 | 2.75 |
| 27 | Ability to received completed/solved assignment from students from time to time through e-mail | 2.62 | .637 | 4.55 | .617 | 1.93 |
| 28 | Ability to receive project topics from students for modification and approval through e-mail | 1.73 | .635 | 4.58 | .628 | 2.85 |
| 29 | Ability to received and comments on students' project through mail | 2.51 | .677 | 4.50 | .717 | 1.99 |
| 30 | Ability to communicate class activities to students through the cloud based tools | 2.43 | .615 | 4.58 | .672 | 2.15 |
| 31 | Ability to organize class for students through zoom application | 1.79 | .698 | 4.37 | .620 | 2.58 |
| 32 | Ability to managing students project and presentation through cloud computing | 2.04 | .916 | 4.35 | .631 | 2.31 |
| 33 | Ability to distribute power point presentation too large for email on business subject to student through Drop Box | 1.94 | .695 | 4.30 | .714 | 2.36 |
| 34 | Ability to received work from students after school hours through cloud application | 2.06 | .841 | 4.37 | .664 | 2.31 |
| 35 | Ability to sharing and synchronizing notes between students through cloud based tool | 2.08 | .712 | 4.48 | .603 | 2.40 |
| 36 | Ability to give assignment online and share with students through Google Docs/Google Drive | 2.28 | .771 | 4.42 | .628 | 2.14 |
| 37 | Ability to use Social networks group page e.g., facebook, Twitter, LinkedIn, WhatsApp(, e.t.c.) to schedule events that relate to lesson for students | 2.11 | .824 | 4.37 | .620 | 2.26 |
| 38 | Ability to deliver/prepare lecture through YOU-TUBE | 2.14 | .755 | 4.33 | .641 | 2.19 |
| 39 | Ability to acquire some tutorials (watching videos and obtain information) to supplement lesson for students on business subject through YOU-TUBE | 2.05 | .778 | 4.35 | .660 | 2.30 |
| 40 | Ability to send message to student through networking sites like Myspace, Face Book, Twitter etc. | 2.01 | .791 | 4.51 | .648 | 2.50 |
| | **Aggregate** | **2.01** | **.146** | **4.45** | **.269** | **2.44** |

*Note*. SD = standard deviation

The results of data presented in Table 1 shows the mean, standard deviation and the mean difference (gap) between the means of possessed and expected levels of utilization of TBIR for teaching. The mean responses of possessed level of utilization range from 1.58 to 2.62; while the mean responses on the expected level of utilization range from 4.30 to 4.58. The table also shows that the gap analysis (mean difference) range from 1.86 to 2.91, which indicates positive mean

differences and above zero. The aggregated mean responses for possessed (*M* = 2.01) and expected (*M* = 4.45) levels of utilization with positive gap analysis (*M* = 2.44) indicate the need for increase skills in the utilization of TBIR for teaching among business educators in colleges of education in Edo and Delta States. It can however be deduced that the extent to which the need for increase skills in the utilization reduces as the values of the TBIR Skills utilization gap analysis also decreases.

**Hypothesis 1**: There is no significant difference in the mean responses of business educators between possessed and expected levelsof utilization of TBIR for teaching.

**Table 2:** Paired t-test on the Difference between Possessed and Expected Levels of Utilization of TBIR for Teaching

| Utilization | Mean | N | SD | Df | T | p | Decision |
|---|---|---|---|---|---|---|---|
| Possessed Level of Utilization | 2.005 | 108 | .146 | | | | |
| | | | | 107 | -91.421 | .000 | Significant |
| Expected Level of Utilization | 4.448 | 108 | .269 | | | | |

*Note*. SD = standard deviation.

Table 2 reveals the aggregate mean responses of business educators on the possessed (*M* = 2.005) and expected (*M* = 4.448) levels of utilization of TBIR for teaching. The table shows significant difference (*t* = 91.421, df = 107, *p*< .001) between the possessed and expected levels of utilization of TBIR for teaching among business educators since the p-value is less than the alpha value of 0.05. The null hypothesis is therefore rejected. Hence, there is a significant difference in the mean responses of business educators between possessed and expected levels of utilization of TBIR for teaching.

**Table 3:** Mean and Standard Deviation on Level of Utilization of TBIR for Teaching based on Experience

| S/N | Item Statement | Work Experience | N | Mean | SD | Remark |
|---|---|---|---|---|---|---|
| 16 | Ability to deliver lecture through the internet | Less Experienced | 38 | 1.68 | .574 | SU |
| | | Experienced | 70 | 1.64 | .638 | SU |
| 17 | Ability to create life web conference (web- quest) and build internet into lesson | Less Experienced | 38 | 1.55 | .686 | SU |
| | | Experienced | 70 | 1.60 | .575 | SU |
| 18 | Ability to create a video conferencing for teaching through internet | Less Experienced | 38 | 1.84 | .638 | SU |
| | | Experienced | 70 | 1.87 | .658 | SU |
| 19 | Ability to post classroom news, activities and resources through internet | Less Experienced | 38 | 1.76 | .675 | SU |
| | | Experienced | 70 | 1.66 | .611 | SU |
| 20 | Ability to use internet photos, Videos, and websites to enhance printed materials such textbooks | Less Experienced | 38 | 1.76 | .590 | SU |
| | | Experienced | 70 | 1.69 | .526 | SU |
| 21 | Ability to use mobile internet devices to access internet and obtain materials for teaching business subject | Less Experienced | 38 | 2.71 | .611 | SU |

| S/N | Item Statement | Work Experience | N | Mean | SD | Remark |
|---|---|---|---|---|---|---|
| | | Experienced | 70 | 2.49 | .654 | SU |
| 22 | Ability to use Laptop Computer for teaching | Less Experienced | 38 | 1.74 | .724 | SU |
| | | Experienced | 70 | 1.64 | .591 | SU |
| 23 | Ability to use Digital Camera | Less Experienced | 38 | 2.47 | .762 | SU |
| | | Experienced | 70 | 2.46 | .774 | SU |
| 24 | Ability to deliver/prepare lecture through I-Pod or MP3 Player | Less Experienced | 38 | 1.76 | .634 | SU |
| | | Experienced | 70 | 1.57 | .554 | SU |
| 25 | Ability to exchange e-mail address with Colleagues and students on issues relating to business subject | Less Experienced | 38 | 1.68 | .739 | SU |
| | | Experienced | 70 | 1.71 | .684 | SU |
| 26 | Ability to communicate assignment to students through e-mail on issues related to business subject and add attachment to buttress where necessary | Less Experienced | 38 | 1.84 | .754 | SU |
| | | Experienced | 70 | 1.76 | .647 | SU |
| 27 | Ability to received completed/solved assignment from students from time to time through e-mail | Less Experienced | 38 | 2.71 | .611 | SU |
| | | Experienced | 70 | 2.57 | .650 | SU |
| 28 | Ability to receive project topics from students for modification and approval through e-mail | Less Experienced | 38 | 1.74 | .644 | SU |
| | | Experienced | 70 | 1.73 | .635 | SU |
| 29 | Ability to received and comments on students' project through mail | Less Experienced | 38 | 2.55 | .686 | SU |
| | | Experienced | 70 | 2.49 | .676 | SU |
| 30 | Ability to communicate class activities to students through the cloud based tools | Less Experienced | 38 | 2.47 | .603 | SU |
| | | Experienced | 70 | 2.40 | .623 | SU |
| 31 | Ability to organize class for students through zoom application | Less Experienced | 38 | 2.03 | .788 | SU |
| | | Experienced | 70 | 1.66 | .611 | SU |
| 32 | Ability to managing students project and presentation through cloud computing | Less Experienced | 38 | 1.97 | .915 | SU |
| | | Experienced | 70 | 2.07 | .922 | SU |
| 33 | Ability to distribute Power point presentation too large for email on business subject to student through Drop Box | Less Experienced | 38 | 2.00 | .735 | SU |
| | | Experienced | 70 | 1.91 | .676 | SU |
| 34 | Ability to received work from students after school hours through cloud application | Less Experienced | 38 | 2.18 | .896 | SU |

| S/N | Item Statement | Work Experience | N | Mean | SD | Remark |
|---|---|---|---|---|---|---|
| | | Experienced | 70 | 1.99 | .807 | SU |
| 35 | Ability to sharing and synchronizing notes between students through cloud based tool | | | | | |
| | | Less Experienced | 38 | 2.21 | .622 | SU |
| | | Experienced | 70 | 2.01 | .752 | SU |
| 36 | Ability to give assignment online and share with students through Google Docs/Google Drive | Less Experienced | 38 | 2.21 | .777 | SU |
| | | Experienced | 70 | 2.31 | .772 | SU |
| 37 | Ability to use Social networks group page e.g., facebook, Twitter, LinkedIn, WhatsApp(, e.t.c.) to schedule events that relate to lesson for students | Less Experienced | 38 | 2.13 | .875 | SU |
| | | Experienced | 70 | 2.10 | .801 | SU |
| 38 | Ability to deliver/prepare lecture through YOU-TUBE | Less Experienced | 38 | 2.11 | .764 | SU |
| | | Experienced | 70 | 2.16 | .754 | SU |
| 39 | Ability to acquire some tutorials (watching videos and obtain information) to supplement lesson for students on business subject through YOU-TUBE | Less Experienced | 38 | 2.13 | .777 | SU |
| | | Experienced | 70 | 2.00 | .780 | SU |
| 40 | Ability to send message to student through networking sites like Myspace, Face Book, Twitter etc. | Less Experienced | 38 | 1.97 | .716 | SU |
| | | Experienced | 70 | 2.03 | .834 | SU |
| | **Aggregate** | **Less Experienced** | **38** | **2.05** | **.149** | **SU** |
| | | **Experienced** | **70** | **1.98** | **.139** | **SU** |

*Note*. SD = standard deviation SU = Slightly Utilize

Table 3 reveals the mean responses of business educators on the level of utilization of TBIR for teaching based on experience. The table shows that the mean response of less experienced business educators ranged from 1.55 to 2.71, while the mean responses of experienced business educators range from 1.57 to 2.57. The aggregate mean responses are 2.05 and 1.98 for less experienced and experienced business educators respectively. This implies that less experienced business educators had higher mean responses in the level of utilization of TBIR for teaching than the experienced business educators with a mean difference of 0.08 and standard deviation score are below one (1). It is to be understood that each mean score of less experienced and experience business educators were not very far from the aggregate mean, and thus proves a slightly differences to the responses on their utilization of TBIR for teaching business subject since the aggregate mean is lower than the criterion aggregate mean score of 3.00 set for high level of utilization of TBIR for teaching.

**Hypothesis 2**: There is no significant difference in the mean responses between less experience and Experience business educators on their levels of utilization of TBIR for teaching

**Table 4: The t-test on the Levels of Utilization of TBIR for Teaching based on Experience**

| Variable | Work Experience | N | Mean | SD | df | t | P | Decision |
|---|---|---|---|---|---|---|---|---|
| Possessed Level | Less Experienced | 38 | 2.050 | .149 | | | | |
| | | | | | 106 | 2.399 | .018 | Significant |
| of Utilization | Experienced | 70 | 1.986 | .139 | | | | |

*Note*. SD = standard deviation.

Data presented in Table 4 show the aggregate mean responses of Less Experienced ($M$ = 2.050) and Experienced ($M$ = 1.986) business educators on the levels of utilization of TBIR for teaching. The table showed no significant difference ($t$ = 2.399, df = 106, $p$< .05) between the less experienced and Experienced business educators on the levels of utilization of TBIR for teaching since the p-value is less than the alpha value of 0.05. The null hypothesis is therefore rejected. Hence, there is a significant difference between the less experienced and the Experienced business educators in the mean responses on their levels of utilization of TBIR for teaching.

Hypothesis 3: There is no significant difference in the means responses among holders of First Degree, Master Degree, and Doctoral Degree Business educators in their use of TBIR for teaching.

**Table 5**: **ANOVA Summary on the Level of utilization of TBIR for Teaching based on Qualification**

| Sources of Variance | Sum of Squares | Df | Mean Square | F | Sig. | Decision |
|---|---|---|---|---|---|---|
| Between Groups | .076 | 2 | .038 | 1.813 | .168 | Not Significant |
| Within Groups | 2.195 | 105 | .021 | | | |
| Total | 2.271 | 107 | | | | |

The results on Table 5 show the ANOVA summary on the difference in the levels of utilization of TBIR for teaching based on the academic qualification (bachelor degree, master's degree, and doctoral degree) among business educators. The table shows no significant difference: $F$(2, 105) = 1.813, $p$> .05, in the level of utilization of TBIR among business educators based on their qualification since the p-value is greater than the alpha value of 0.05. The null hypothesis is, therefore, retained. Hence, there is no significant difference in the means responses between bachelor degree, master's degree, and doctoral degree Business educators' on their levels of utilization of TBIR for teaching

**Discussion of Findings**

The result in Table 1 showed that twenty five items of TBIR for teaching used as a measure to determined their skills level, have the value of Skill utilization gap analysis ranging from 1.86 to 2.91, indicating that skills in utilization of TBIR are very highly needed by the Business educators since the skill utilization gap value is positive. The result of data analysis in Table 1 further revealed that there exist skills utilization gap between business educators current capabilities and the skills they needs in the utilization of TBIR for teaching. Corroborating this finding, the findings are in agreement with that of Akinnagbe and Baiyeri (2011) on training needs analysis of lecturers for information and communication technology (ICT) skills enhancement where the authors found that the lecturers were not skilled in slides preparation/presentation, spreadsheets preparation, and data analysis using computer software. Also, finding of the study is in agreement with that of Chukwuedo and Igbinedion (2014) which reported that TVE lecturers need capacity building in the use of ICT for instructional, research and administrative purpose In addition, the findings are in disparity with that of Ajie-Uche,

Efughi, and Ajaero (2018) where the authors reported that business education lecturers do not need capacity building in the five identified multimedia skills for effective teaching in tertiary institutions in south-south Nigeria.

The result of the corresponding hypothesis one statistically showed that there was significant difference in the mean responses of business educators between possessed and expected levels of utilization of TBIR for teaching. This implies that the business educators' possessed levels of utilization are different from expected levels of utilization of TBIR for teaching but the different was not significant.

The data generated as presented in Table 3 showed the mean responses of business educators on the level of utilization of TBIR for teaching based on experience. The Table showed that all the 25 items of the questionnaire used to measure this area showed slightly utilized for both less experienced and experienced respondents on utilization of TBIR for teaching. The aggregate mean of 2.05, and 1.98 was reported for less experienced and experienced business educators respectively. This signifies that Business educators slightly utilized TBIR for teaching and the less experienced business educators had higher mean response in the level of utilization of TBIR for teaching than the experienced business educators in Colleges of education in Edo and Delta States. The finding of this study is in disparity with that of Wolters and Daugherty (2007) who found that teachers with additional years of experience felt more confident in their ability to employ instructional and assessment practices that would benefit even the most difficult students. However, the finding of this study is in agreement with that of Ismail, (2015), who reported that teachers with the least amount of experience have grown up in a technology-rich society, and they must have likely used it while they were in school, whereas teachers with more than 25 years of experience would have had to make efforts to acquire technological adeptness.

Equally, the result of the corresponding hypothesis two statistically found that there is a significant difference between the less experienced and the experienced business educators in their mean responses on levels of utilization of TBIR for teaching. This implies that the levels of utilization of various TBIR for teaching amongst less experienced are different from those of experienced Business educators. This may be due to the fact that the younger business educators are more familiar with technology usage. The study proves that there is demographic differentiation in the utilization of TBIR in favour of less experienced business educators inn Edo and Delta States Colleges of education

The result of the hypothesis Three on Table 5 statistically showed that there was no significant difference in the means responses among holders of First Degree, Master Degree, and Doctoral Degree Business educators in their use of TBIR for teaching. This implies that their rate of utilization of TBIR for teaching are almost the same but with First Degree business educators have slightly higher mean response than Master Degree business educators, and Doctoral Degree business educators. The results revealed that the holders of bachelor degree, business educators had higher mean response on the use of TBIR for teaching than Master Degree business educators and Doctoral Degree business educators. This signifies that business educators slightly utilized TBIR for teaching based on academic qualification with no difference existing among them. The finding of the study is in agreement with the finding of Onasanya, Shehu, Ogunlade and Adefuye (2011), which showed that the level of utilization of ICT resources of teachers examined was found to be very low. The findings of the study is in disparity with that of Attar

and Sweiss, (2010) which found that employees that possess a college or graduate degree qualification had high levels of e-business technology than those that did not possess any degree.

**Conclusion**

Based on the findings of this study, the study concluded that there exist skill utilization gap between possessed and expected levels of utilization of various TBIR for teaching. The study further concluded that Business educators are not significantly differentiated on the utilization of TBIR for teaching based on work experience. but that there was demographic differentiation with regard to TBIR utilization between the less experienced and experienced business educators, resolved in favour of the less experienced business educators, also the study further revealed that there was no significant difference in the utilization of TBIR for teaching among business educators based on academic qualification.

**Recommendations**

In view of the foregoing and the findings from this study, the following recommendations are considered necessary

1. Efforts should be made by institutions management to educate Business Educators on the use of TBIR to improve teaching and learning activities through Seminar, workshop and Conference
2. Business educators both less experienced and experienced should be provided opportunities to sharpen their skills in the use of TBIR in their teaching pedagogy.
3. The Experienced business educators should be given more training in the use of TBIR to upgrade their skills for pedagogical purposes

**References**

Abdelraheem A. & Asan A. (2006). The effectiveness of inquiry- based technology enhanced collaorative learning environment. *Journal of Technology in Teaching and Learning. 2(2),* 65 - 87

Ajie-Uche, G., Efughi, S.A., & Ajaero, O.O. (2018). Capacity building needs of business education lecturers in ICT-based teaching in tertiary institutions in south-south Nigeria. *Nigerian Journal of Business Education (NIGJBED), 5(1),* 323-335

Akinnagbe, O. M & Baiyeri P. (2011). Training needs analysis of lecturers for information and communication technology (ICT) skills enhancement. *African Journal of Agricultural Research,* 6(32) 6635- 6646

Anthony J. J. (2012). Incorporating a needs assessment and gap analysis into the educational design. Retrieved from https: //www.annanurse.org / sites/ default/ files/ download/ reference/ pnp/ pnp8-03-07.pdf on 14th September, 2019

Chukwuedo, S. O. & Igbinedion, V.I. (2014). ICT competences and capacity building needs of Technical and Vocational Education Lecturers in Nigerian Universities. *African Journal of Interdisciplinary Studies,* (7) 45 – 53.

Davis F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 13(3), 475-487.

Inan.I, A., & Lowther. D. L. (2009). Factors affecting technology integration in K-12 classrooms: a path model. *Education Tech Research Dev.*, 58.2: 137-154. Retrieved from http://dx.doi.org/10.1007/s11423-009-9132-y on 14th September, 2019

Shahnawaz M. & Vikas A. (2007). Exploring Perception of Technology Usefulness as a

Mediator between ICT support and knowledge sharing. *Journal of Academy of Business and Economics*, 7 (2) 1 - 8

UNDP.(2011). Promoting ICT for human development programme. A Pionnering Regional Human Development Report in Asia. Retrieve from http://www.apdip.net/projects/rhdr/resources/PDF on 15/08/2019

Wolters, C., & Daugherty, S. G. (2007). Goal structures and teachers' sense of efficacy: Their relation and association to teaching experience and academic level. *Journal of Educational Psychology*, 99, 181.