

Twenty-First Century Skills Needed by Business Education Graduates of Tertiary Institutions: Observation from Business Educators in Enugu State, Nigeria

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Abstract: This study examines the 21st-century skills essential for the employability of Business Education graduates, as perceived by business educators in Enugu State tertiary institutions. The study's primary objective was to identify the competencies required by graduates for successful employment in Nigeria's labour market. A descriptive survey research design was adopted, with a population of 69 business educators from the Association of Business Educators of Nigeria (ABEN), Enugu State Chapter. The entire population was studied using a structured questionnaire titled "Twenty-First Century Skills Needed by Business Education Graduates for Employability" (TFCSNBEGE), which achieved a Cronbach Alpha reliability index of 0.75. Two research questions and two null hypotheses guided the study. Data were analyzed using mean, standard deviation, and t-test statistics. The findings revealed that critical thinking, creativity, teamwork, communication, information literacy, and media literacy are crucial skills for employability. There were no significant differences between male and female educators' perceptions of these skills. It was recommended that Business Education curricula emphasize the development of these 21st-century competencies to enhance graduates' employability.

Keywords: 21st-century skills, business education graduates, business educators

Introduction

The world is dynamic. It continues to evolve due to the consistent changes and improvement in technology brought about by civilization. The skills, knowledge and competencies required in today's world of work may be rendered obsolete due to changes in technology thereby demanding new skills on workers. Consequently, employees are faced with the challenges of skilling and re-skilling to continue to remain relevant in their places of work, while the prospective employees struggle to acquire the needed new skills to gain employment into industries and businesses.

In this 21st century, emphasis is being laid on the possession of 21st century skills for employability and retention of employees in their places of work, and for success in the modern world. 21st century skills are a term used to describe the skills and competencies required to succeed in the modern, rapidly changing world (AI source). The terms "21st century skills" and soft skills are often used interchangeably, but they are not exactly the same thing. 21st century skills is a broader term that encompasses not only soft skills but also other essential skills for success in the modern world, such as digital skills, critical thinking, problem solving, creativity, innovation, global citizenship, media literacy, information literacy and others (Vasanthakumari 2019). According to (Vasanthakumari 2019) 21st century skills are more comprehensive framework that prepares individuals for the challenges and opportunities of the modern world. Soft skills refer to those personal attributes and personality

traits that enhance an individual's ability to interact and work with others, such as communication skills, emotional intelligence, empathy, time management, adaptability, teamwork, leadership and others in a rapidly changing world.

Business education graduates need to be equipped with the 21st century skills for them to be gainfully employed and retain their jobs in this modern world of work. Business education is an aspect of vocational education that prepares its recipient for earning a living in their adult life as salaried workers or as self-employed persons and more importantly as employers of labour. The program of Business education is, therefore, designed and consistently re-designed to always inculcate in the students the necessary skills and knowledge that will meet the need of employers at any given time. It is necessary to determine the 21st century skills that are needed by the business education graduates and equip them with such skills during their course of studies, hence the need for this work.

21st century skills are categorized into three which includes Learning skills, Literacy skills and Life skills. Learning Skills comprise Critical thinking skills, Creativity and Innovation skills, Communication and Collaboration skills. (4C's). Literacy Skills comprise Information literacy skills, Media literacy skills and Technology literacy skills (IMT), while Life Skills include Flexibility skills, Initiative skills, Social skills, Productivity and leadership skills ((FISPL). This present work focuses only on two groups of 21st century namely, Learning skills and Literacy skills (Anil, 2020).

These skills are explained below according to Anil (2020). Learning Skills comprise Critical thinking skills, Creativity and Innovation skills, and Communication and Collaboration skills (4C's). Critical thinking skills are the capability of objective analysis of information. Creativity skills are the skills to see and discover new ways of doing things. Innovative skills refer to the skills for thinking creatively to developing something new or unique or to improve on existing products. Collaboration skills are the ability to effectively work together with others. Communication skills means the capability to express appropriately one's opinions, desires, needs, and apprehensions verbally and non-verbally.

Literacy skills comprise information Literacy skills, Media Literacy skills and Technology Literacy skills. Information literacy skills involve the ability to access information (traditional or digital), Media and technology literacy skills refer to the ability to understand and critically evaluate different aspects of content and information and create and communicate effectively.

Obviously, critical analysis of the concept of the 21st century skills above reveals that most of the aforementioned skills have been known and possessed and utilized by workers, including Business Education graduates in their places of work before this 21st century. For instance, such skills like communication skill, leadership skills, problem solving skills, decision making initiatives, team work skills have been the soft skills that Business Education students are taught in the course of their studies because these are the soft skills needed by most employers of labour. Jeanna (2024) noted that the concept of "21st century skills" is not new, skills like critical thinking, collaboration, and problem solving have been taught in classrooms for decades. However, the 4th industrial revolution in this 21st century with its attendant technological changes and innovation has given new dimension to those skills which are presently being advocated.

According to Mitchell (2021), while companies value discipline-based knowledge, individuals also need to possess an acceptable degree of soft skills, which are a component of 21st-century abilities, to advance in their careers. As a result, employers are placing more emphasis on employability skills for all candidates, including

graduates of business schools. The word employability indicates one's ability to get initial employment, maintain current employment, and acquire new employment if needed. Employability skills refer to the attributes of a person that make that person able to gain and maintain employment (Wikipedia, 2022).

Business Education provides the individuals with competencies to be self-reliant and prepares them to handle their own businesses and function effectively as producers or consumers in the contemporary world. Business Education is a self-reliance course that offers job opportunities in marketing, secretarial, accounting, management among others (Ademiluyi, Bello & kande, 2019). The bone of contention now is whether the skills, knowledge and personality traits which Business Education programme produces in the recipients agree with what the employers' want in this 21st century industries. There is the need for Business Education students to be equipped with the 21st century skills to be able to be gainfully employed in this 21st century world of work and also retain their jobs. Some researchers including Ewolola (2021), have noted that graduates of business education find it challenging to function adequately in the modern workplace due to a lack of the necessary soft skills. Due to this, employers of labor are now dissatisfied with the output of graduates of business education. Employers of labor as well as educators frequently lament the lack of soft skills among graduates of postsecondary schools (Ademiluyi, Bello, & Akande, 2019). Ewolola 2021 noted that Business Education students of this 21st century need to be equipped with the salable skills for employability. Nile (2022) noted that skills of problem-solving, interpersonal skills, creative thinking, and adaptability will be highly in demand in the upcoming age. However, for the current workforce, upskilling and reskilling are required to cope with changes). Both the curriculum and the methodology of the teachers should take these into account. This implies that in addition to providing an environment that will support the teaching and learning of the new abilities, business educators themselves should be able to instill the new skills in their pupils. Because of this, business educators must keep up with the latest developments in technology and digital skills in order to implement the creative teaching techniques required to impart 21st century abilities.

Business educators should be able to equip themselves with the 21st century skills required of their students, and also be able to impart such skills in their students using the appropriate teaching strategies. Otherwise, the students will not be able to acquire the skills demanded of them in the job market. Odike and Noke (2023) noted that Vocational education can be effective only to the extent the instructors have the requisite knowledge and competences to teach their students. That means that if the business educators who are teaching Business Education student do not have the knowledge of what to teach and the pedagogy of teaching them, quality learning cannot take place. It has been observed by some researchers including (Thompson 2021), and Adreria (2020) that teaching 21st century skills requires innovative strategies that foster critical thinking, creativity and collaboration. Business Education graduates should endeavor to equip themselves with 21st century skills to be employable. Anything contrary to this will render them jobless or under-employed since they will not be suited for the job of the 21st century industries. It is imperative to determine the exact 21st century skills they need to meet the contemporary need of employers or to even own and run their business successfully. It is against this backdrop that this study is being conducted to investigate the 21st century skills required by Business Education graduates for employability in Nigeria. Oluwalola (2021) carried out a study titled "Perception of Students and Teachers of Colleges of Education in Oyo State, Nigeria on the Soft Skills Required of Business Education Graduates." The survey type was designed descriptively. The study's target audience consisted of 240 respondents, purposefully sampled from two federally and state-owned institutes of education in Oyo Town, 200 students in the Department of Business Education, and 40 instructors. Most lecturers and students, according to the findings, felt that developing a respectable number of the soft skills identified would help them become employable. The study and

the current study are connected. Ouwalola's study, on the other hand, was limited to soft skills, but the current study concentrates on 21st-century abilities, which include both soft and other talents.

The Fourth Industrial Revolution competencies set for the Employability of Business graduates in Bangladesh were investigated by Wahida and Akther (2022). This essay evaluates the skill sets of Bangladeshi business education graduates to identify areas of deficiency to assess their readiness for work in the modern industry 4.0. However, after the entire study was finished, it was found that the three key areas in which current business graduates fall short are knowledge of artificial intelligence, cognitive flexibility, and data analysis skills. The two studies are similar since they both looked at the employability abilities required of graduates in business education. Nevertheless, Bangladesh, not Nigeria, was the location of the evaluation.

Statement of Problem

Emphasis is now on the possession of 21st-century skills for employability and retention of employees in their places of work. Business Education graduates are not left out of this demand of employers. They equally need 21st-century skills for them to be gainfully employed and retain their jobs. Regretfully, in recent years, educators and employers of labour have often lamented the lack of soft skills among university graduates. Researchers have also noted that a lack of soft skills makes it challenging for Business Education graduates to function to the best of their abilities in the modern workplace.

For this reason, some employers of labour are dissatisfied with the work produced by graduates of Business education programs. Without a doubt, this will deter companies from hiring recent graduates in business education. Future graduates of business education will face a high unemployment rate because of the current circumstances. As a result, people who are unemployed after graduation can turn to illicit activities to make ends meet, which will be detrimental to them and society in general.

Objectives of the Study

1. To ascertain the 21st-century learning skills needed by Business Education graduates for employability.
2. To find out the 21st-century Information literacy and media literacy skills needed by Business Education graduates for employability.

Research Questions

1. To what extent do Business Education graduates need 21st-century learning skills for employability?
2. To what degree do Business Education graduates need 21st-century Information literacy and media literacy skills for employability?

Research Hypotheses

Ho1: There is no significant difference between the mean rating of male and female Business educator on the extent the Business Education graduates need 21st century learning skills for employability.

Ho2: There is no significant difference between the mean rating of male and female Business educator on the extent the Business Education graduates need 21st century Information literacy and media literacy skills for employability.

Methodology

For this study, a descriptive survey research design was used. The area of study was Enugu state of Nigeria. All 69 business educators in Enugu State's tertiary schools who are members of the Association of Business Educators (ABEN) Enugu State Chapter make up the study's population of these, 27 were male and 42 were female. Every member of the population was examined.

The instrument used for collecting data was a structured Questionnaire developed by the researchers titled. The title of the instrument is "Twenty-first century Skills Needed by Business Education Graduates for Employability" (TFCSNBEGE). Four-point rating scale of Very High Extent (VHE) 4points.High Extent (HE) 3 points; Low Extent (LE) 2points; and Very Low Extent (VLE) 1point was used for the three research questions. The instrument was face-validated by three specialists, one from the Department of Measurement and Evaluation and two from the Department of Vocational Education, Godfrey Okoye University, Enugu. The instrument's reliability was

determined with Cronbach Alpha and indicated high internal consistency. Cronbach Alpha reliability indexes obtained were as follows: 21st century learning skills, 0.75, and 21st century information literacy and media literacy skills 0.74. Sixty-five responses were collected and analyzed representing 94% return rate.

Sixty-five responses were collected and analyzed representing 94% return rate. Mean and standard deviation were used to answer the two research questions, and the t-test statistical tool was employed to test the two null hypotheses at the 0.05 alpha level of significance. A mean score of 2.5 or higher was accepted, while a score of less than 2.5 was rejected. If the t-calculated at 0.05 was greater than the table t, the null hypothesis was accepted; if not, it was rejected.

Result

1. The extent Business Education graduates need the following 21st learning skills for employment

Table 1: Mean Ratings of the Male and Female Business Educator on the Extent the Business Education Graduates Need 21st Century Learning Skills for Employment

| S /No | Item Statements | Male N ₁ =25 | | Female N ₂ = 40 | | Decision |
|---|---|----------------------------|-----------------|-------------------------------|-----------------|-----------|
| | | \bar{x}_1 | SD ₁ | \bar{x}_2 | SD ₂ | |
| Cluster A : Critical Thinking Skills | | | | | | |
| 1 | Analyzing information and ideas | 3.80 | 0.41 | 3.88 | 0.34 | Agree |
| 2 | Identifying patterns and relationships | 3.76 | 0.44 | 3.85 | 0.36 | HE |
| 3 | Developing solutions and making informed decisions | 3.76 | 0.44 | 3.80 | 0.41 | HE |
| 4 | Evaluating evidence and arguments | 3.52 | 0.51 | 3.58 | 0.50 | HE |
| | Grand Means/ Standard Deviations | 3.71 | 0.45 | 3.78 | 0.40 | HE |
| Cluster B: Creativity and Innovation skills | | | | | | |
| 5 | Generating new ideas and possibilities | 3.84 | 0.37 | 3.78 | 0.42 | HE |
| 6 | Designing and prototyping solutions | 3.28 | 0.46 | 3.25 | 0.71 | HE |
| 7 | Taking calculated risks and experimenting | 3.60 | 0.50 | 3.50 | 0.72 | HE |
| 8 | Finding innovative solutions to real-world problems | 3.56 | 0.51 | 3.85 | 0.36 | HE |
| | Grand Means/ Standard Deviations | 3.57 | 0.46 | 3.60 | 0.55 | HE |
| Cluster C: Communication and collaboration Skills | | | | | | |
| 9 | Expressing ideas and thoughts effectively | 3.84 | 0.37 | 3.80 | 0.41 | HE |
| 10 | Listening actively and empathetically | 3.36 | 0.49 | 3.48 | 0.72 | HE |
| 11 | Working together with diverse term | 3.40 | 0.50 | 3.60 | 0.74 | HE |
| 12 | Building strong relation networks | 3.80 | 0.41 | 3.88 | 0.34 | HE |
| | Grand Means/ Standard Deviations | 3.60 | 0.44 | 3.69 | 0.55 | HE |

Table 1's data showed that the grand mean ratings of the four questions in cluster A ranged from 3.71 to 3.78, suggesting that a high degree of critical thinking is required of business education graduates seeking employment. It also demonstrates that four of the cluster B items are 21st century learning abilities, which are highly necessary for work. These talents are creative and inventive. The same data in table 1 equally showed that the all the communication and collaboration skills listed in Cluster "C" are required to a high extent for employment of Business education graduates

2. The degree Business Education graduates need Information and Media Literacy skills for employment

Table 2: Mean Ratings on the extent Business Education graduates need Information and Media Literacy skills for employment

| S /No | Item Statements | Male N ₁ =25 | | Female N ₂ = 40 | | Decision |
|----------------------------------|--|----------------------------|-----------------|-------------------------------|-----------------|----------|
| | | \bar{x}_1 | SD ₁ | \bar{x}_2 | SD ₂ | |
| 13 | Finding and evaluating sources of sources of information | 3.16 | 0.37 | 3.75 | 0.44 | HE |
| 14 | Understanding and using various media forms | 3.40 | 0.50 | 3.73 | 0.45 | HE |
| 15 | Analyzing and creating media messages | 3.48 | 0.51 | 3.38 | 0.74 | HE |
| 16 | Using technology to access and manage information | 3.76 | 0.44 | 3.75 | 0.44 | HE |
| Grand Means/ Standard Deviations | | 3.45 | 0.46 | 3.65 | 0.52 | HE |

Based on the information displayed in Table 2, it can be inferred that the average scores for both male and female business educators on the four items range from 3.17 to 3.76, surpassing the 2.50 cut-off threshold. This showed that the respondents were in agreement that graduates of business education programs require a high degree of all four of the above information and media literacy abilities in order to be employed. The four items' standard deviation values ranged from 0.37 to 0.74, indicating that respondents' responses are often in close proximity to the mean.

Testing of Hypotheses

HO₁: There is no significant difference between the mean rating of male and female Business Educator on the extent the Business Education graduates need 21st century learning skills for employment.

| Groups | No | Mean | Standard Deviation | Level of Sig. | of T | t-tab | Df | p- value | Decision |
|--------|----|------|-----------------------|------------------|-------|-------|----|-------------|--------------------------------|
| Male | 25 | 3.63 | 0.45 | 0.05 | -0.50 | 2,00 | 63 | 0.62 | Not Significant (Uphold) |
| Female | 40 | 3.69 | 0.50 | | | | | | |

The t-test analysis of the mean ratings of business educators, both male and female, regarding the extent to which graduates of business education require 21st-century learning skills for work is displayed in Table 3. It was discovered that there is no discernible gender difference across all 12 items. Means = $t(-0.50, p = 0.62) = (3.63, 3.69)$. The p-value of 0.62 is higher than the significant set's 0.05 limit. Therefore, the hypothesis that there is no significant difference was supported for each of the cluster's 12 components.

HO₂: There is no significant difference between the mean rating of male and female Business educator on the extent the Business Education graduates need 21st century Information and Media literacy skills for employment.

Table 4: t-test Analysis on the mean rating of male and female Business Educator on the extent Business Education graduates need 21st century Information and Media literacy skills

| Groups | No | Mean | Standard Deviation | Level of Sig. | T | t-tab | Df | p-value | Decision |
|--------|----|------|--------------------|---------------|-------|-------|----|---------|-----------------|
| Male | 25 | 3.45 | 0.46 | 0.05 | -0.62 | 2.00 | 63 | 0.54 | Not Significant |
| Female | 40 | 3.65 | 0.52 | | | | | | (Uphold) |

The t-test analysis of the mean ratings of male and female business educators about the degree to which graduates of business education programs require 21st-century information and media literacy abilities was made possible by the data shown in Table 4. It was discovered that there is no discernible gender difference for any of the four items. Means = $t(-0.62, p = 0.54) = (3.45, 3.65)$. The p-value of 0.54 exceeds the significant set's 0.05 criterion. Thus, for all four of the cluster's elements, the hypothesis that there is no significant difference was upheld.

Discussion of the Findings

The study's conclusions are presented here in paragraph form, following the precise order in which the objectives were given. Determining the degree to which graduates of business education required 21st-century learning capabilities for employment was the first research goal. Table 1 showed that both male and female business educators believed that graduates of business education programs would greatly benefit from having 21st-century learning abilities, such as critical thinking, creativity, and innovation. This research supports Oluwalola's (2021) assertion that graduates in business education need to have a certain set of soft skills to navigate the current labour market obstacles.

This also is in accord with the study by Nile (2022) that skills of problem-solving, interpersonal skills, creative thinking, and adaptability will be highly in demand for the next generation. More so, table 1 further indicated that the items in cluster "C"-communication and collaboration skills were highly required for 21st century employment. This is also consistent with the findings of Somprach et al. (2014), who stated that soft skills, such as communication skills, are necessary for an individual to be able to perform better and more successfully in any kind of workplace.

Determining the degree to which graduates of business education programs require media and information literacy abilities for the twenty-first century in order to be employable was the second research goal. Table 2 revealed that the respondents agreed that all the 4 itemized Information and Media Literacy skills - finding and evaluating sources of information, understanding and using various media forms, analyzing and creating media messages and using technology to access and manage information are equally highly needed Business Education graduates employability. The finding agrees with that of Ritimoni, Krishna, Guwahati, and Krishna (2021) that lack of ICT skills and lack of proper digital services were the challenges facing blended learning during the COVID-19 pandemic in India.

Regarding the hypotheses, the first null hypothesis's findings showed that there is no significant difference in the mean replies from male and female business educators at the tertiary institution in Enugu State about the degree to which graduates in business education require 21st-century learning capabilities to find work. As a result, the hypothesis that there is no significant difference was supported for each of the cluster's 12 components. The results of the second null hypothesis showed that there is no discernible difference between the mean replies of male and female business educators about the degree to which graduates of business education require

information and media literacy abilities relevant to the twenty-first century to find employment. As a result, the hypothesis that there is no significant difference was supported for each of the cluster's 12 components.

Conclusion and Recommendations

The researchers concluded that graduates of business education programs needed 21st-century learning skills, information literacy, and media skills for employability based on their results, discussions, and evaluations of the findings. The talents that most businesses are currently looking for in potential recruits are 21st-century skills. Apart from employment purposes, there are many other benefits to possessing 21st-century skills by an individual. It enhances the capacity for effective problem-solving and decision-making as well as the ability for effective communication. It amplifies the innovation and entrepreneurial potential of individuals. It is, therefore, vitally important that every individual endeavours to equip himself or herself with the necessary 21st-century abilities for the good of particular individuals and society as a whole.

Following the findings and conclusions, the researchers recommend the following:

1. Business Education students should strive to acquire all the 21st-century learning and literacy skills needed for their employability after graduation. These include Critical thinking skills, Creativity and Innovation abilities, Communication and Collaboration skills, Information literacy skills, Media literacy skills, and Technology literacy skills.
2. Business education lecturers should endeavor to inculcate 21st-century skills in their students to enhance their employability after graduation.

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