



BUSINESS EDUCATORS' ASSESSMENT OF DIGITAL CREATIVITY AND LITERACY SKILLS FOR GRADUATE EMPLOYABILITY IN NIGERIAN UNIVERSITIES

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ABSTRACT: *The rapid digital transformation of the global economy has fundamentally altered the employability landscape, demanding that business education graduates possess robust digital competencies. This study investigated the rating of digital creativity and digital literacy skills required for the employability of business education graduates, as perceived by business educators in universities in Anambra State, Nigeria. Utilizing a descriptive survey design, data were collected from 45 business educators across three universities. A structured questionnaire measured perceptions of 5 digital creativity skills and 4 digital literacy skills on a 5-point Likert scale. Findings revealed that both digital creativity skills (grand mean = 3.92) and digital literacy skills (grand mean = 4.35) were rated as "Highly required." Key skills included the use of graphic design tools (mean = 4.04), social media marketing (mean = 4.33), word processing (mean = 4.47), and online collaboration tools (mean = 4.18). Inferential statistics indicated no significant differences in ratings based on educators' gender ($p > .05$) or years of teaching experience ($p > .05$). The study concludes that business educators unanimously recognize these skills as critical. It recommends the mandatory integration of practical, hands-on modules for graphic design, video editing, and advanced word processing into the business education curriculum.*

KEYWORDS: Digital creativity, digital literacy, business educators, employability, business education graduates, Anambra State, Nigeria.



INTRODUCTION

In the 21st century, digital skills have emerged as critical competencies for employability across various sectors, including business education. In Anambra State, Nigeria, where universities produce graduates for a competitive job market, understanding the digital skills required for employability becomes imperative. Business education is designed to equip students with practical skills and knowledge necessary for the workforce, integrating various disciplines, including management, finance, marketing, and information technology (Federal Republic of Nigeria, 2014).

According to the Core Curriculum Minimum Academic Standards (CCMAS, 2023), business education provides students with knowledge, skills, and competencies needed to understand and participate effectively in the world of business. The Nigerian National Policy on Education (2023) emphasizes the importance of business education in preparing students for entrepreneurship, self-employment, and employment across various sectors of the economy.

Digital creativity refers to the ability to use digital tools and technologies to explore creative ideas, find new ways of displaying information, and solve problems innovatively (Dyndevice, 2025). Mathew et al. (2020) described digital creativity as creativity driven by digital technologies, using technology to foster creativity since technology itself is a product of creative thinking. Digital literacy, on the other hand, refers to the ability to effectively and critically navigate, evaluate, and create information using a range of digital technologies (Jisc, 2016). Okeji *et al.* (2020) opined that digital literacy involves the ability to understand information and perform tasks digitally in a digital environment.

Despite the critical role that business educators play in shaping curriculum and equipping students with necessary skills, there is limited empirical evidence regarding their perceptions of specific digital skills deemed most important for employability. This gap in knowledge poses challenges for curriculum development and the alignment of educational outcomes with industry requirements.

The rapid advancement of digital technologies has significantly transformed the business landscape, creating a demand for graduates equipped with relevant digital skills to enhance their employability. However, there is a growing concern that business education graduates in Anambra State may not be sufficiently prepared with essential digital competencies required by employers. Despite the critical role business educators play, limited empirical evidence exists regarding their perceptions of the specific digital skills most important for employability.

The main purpose of this study was to ascertain business educators' ratings of digital skills required for employability of business education graduates in universities in Anambra State. Specifically, this article focuses on:

1. Digital creativity skills required for employability of business education graduates.
2. Digital literacy skills required for employability of business education graduates.



Research Questions

1. What are the digital creativity skills required for the employability of business education graduates in universities in Anambra State?
2. What are the digital literacy skills required for the employability of business education graduates in universities in Anambra State?

Hypotheses

H01: There is no significant difference in the mean ratings of business educators on digital creativity skills required for employability based on gender.

H02: Business educators do not differ significantly in their mean ratings on digital creativity skills based on years of teaching experience.

H03: There is no significant difference in the mean ratings of business educators on digital literacy skills required for employability based on gender.

H04: Business educators do not differ significantly in their mean ratings on digital literacy skills based on years of teaching experience.

This study was anchored on the Human Capital Theory, primarily conceptualized by Adam Smith (1776) and later developed by economists like T.W. Schultz and Gary Becker (1964). The theory posits that individuals and groups can invest in their own education, training, and health to enhance their productivity and economic value. The theory suggests that skills, knowledge, and experience acquired through education and training are forms of capital that lead to higher earnings and improved economic outcomes. This theory supports the idea that investment in digital skills training is crucial for graduates to increase their human capital and improve job prospects in a technology-driven economy.

MATERIALS AND METHODS

Research Design

The descriptive survey research design was adopted for this study. According to Nworgu (2015), descriptive survey research aims at collecting data and describing data systematically about a given population. This design was suitable as it used a questionnaire to collect data from a specific population of business educators to rate digital skills on a Likert scale, providing quantitative data that could be statistically analyzed.

Area of the Study

The study was carried out in Anambra State, South-Eastern Nigeria. Anambra State, commonly referred to as the "Light of the Nation," was created on August 27, 1991, with Awka as the capital. The state is bordered by Delta State to the west, Kogi State to the north, Enugu State to the east, and Imo State to the south. The choice of this area was influenced by the large concentration of industries where business education graduates are expected to be employed, necessitating the need for business educators to rate digital skills needed for employability.



Population of the Study

The population comprised all 48 business educators in the three universities in Anambra State offering business education: 11 from Chukwuemeka Odumegwu Ojukwu University Igbariam, 25 from Nnamdi Azikiwe University Awka, and 12 from Madonna University Okija, as of June 2025.

Sample and Sampling Technique

The entire population of 48 business educators was used for the study through a census sampling technique, as the population was manageable.

Instrument for Data Collection

The instrument was a structured questionnaire titled "Business Educators' Rating of Digital Skills Required for Employability of Business Education Graduates Questionnaire (BERDSREBEGQ)." For this article, sections covered digital creativity skills (5 items) and digital literacy skills (4 items). The instrument was structured on a 5-point rating scale: Very Highly Required (5), Highly Required (4), Moderately Required (3), Lowly Required (2), and Very Lowly Required (1).

Validation of the Instrument

The questionnaire was subjected to face validation by three experts in Business Education from the Faculty of Technology and Vocational Education, Nnamdi Azikiwe University, Awka. Experts examined the items for content relevance, suitability, clarity, and coverage of the study dimensions. Corrections were reflected in the final version.

Reliability of the Instrument

The instrument was trial-tested on 25 business educators in Enugu State (not part of the population). Cronbach's Alpha was used to determine internal consistency, yielding reliability coefficients of .800 for digital creativity skills and .906 for digital literacy skills, indicating the instrument was reliable.

Method of Data Collection

The researcher administered copies of the instrument to respondents through Google Forms with the aid of research assistants. The exercise lasted three weeks. Out of 48 copies distributed, 45 were retrieved and used for data analysis, representing a 93.75% response rate.

Method of Data Analysis

Data were analyzed using mean and standard deviation to answer research questions. The decision on questionnaire items was based on the following real limits: 4.50-5.00 (Very Highly Required), 3.50-4.49 (Highly Required), 2.50-3.49 (Moderately Required), 1.50-2.49 (Lowly Required), 1.00-1.49 (Very Lowly Required). Analysis of Variance (ANOVA) was used to test hypotheses related to years of teaching experience, and a t-test was used for gender. Null hypotheses were tested at 0.05 level of significance.



RESULTS

Research Question 1: Digital Creativity Skills Required for Employability

Table 1: Digital Creativity Skills Required for Employability (N=45)

S/N	Digital Creativity Skills	Mean	SD	Decision
1	Use graphic design tools (e.g., Canva and Adobe Photoshop)	4.04	1.00	Highly Required
2	Perform video editing (e.g., Adobe Premiere, Final Cut Pro)	3.87	1.12	Highly Required
3	Engage in content creation (blogging and vlogging)	3.67	1.00	Highly Required
4	Use social media marketing for campaigns and account management	4.33	0.80	Highly Required
5	Apply data visualization tools (e.g., Wix, WordPress)	3.67	1.04	Highly Required
	Grand Mean	3.92	0.12	Highly Required

The table 1 above shows that all five digital creativity skills had mean ratings ranging from 3.67 to 4.33, all within the "Highly Required" range. The grand mean of 3.92 indicates that digital creativity skills are highly required for employability of business education graduates.

Research Question 2: Digital Literacy Skills Required for Employability

Table 2: Digital Literacy Skills Required for Employability (N=45)

S/N	Digital Literacy Skills	Mean	SD	Decision
6	Use basic computer operations (OS, file management, internet navigation)	4.42	0.69	Highly Required
7	Use word processing and spreadsheets (MS Word, Google Docs, Excel)	4.47	0.63	Highly Required
8	Use presentation tools and communication platforms (PowerPoint, email)	4.33	0.85	Highly Required
9	Use online collaboration tools (Google Drive, Microsoft Teams)	4.18	0.86	Highly Required
	Grand Mean	4.35	0.12	Highly Required

Table 2 shows that all digital literacy skills had mean ratings ranging from 4.18 to 4.47, all within the "Highly Required" range. The grand mean of 4.35 indicates that digital literacy skills are highly required for employability.



Hypothesis 1: Gender Differences in Digital Creativity Skills Rating

Table 3: ANOVA Summary for Digital Creativity Skills by Gender

Source	SS	df	MS	F	p-value	Decision
Between Groups	0.116	1	0.116	0.225	0.638	Not Significant
Within Groups	22.163	43	0.515			
Total	22.279	44				

At $\alpha = 0.05$, the calculated F-ratio was .225 with a significance of .638 > .05. Therefore, the null hypothesis was ****not rejected****. There is no significant difference in the mean ratings of male and female business educators on digital creativity skills.

Hypothesis 2: Teaching Experience Differences in Digital Creativity Skills Rating

Table 4: ANOVA Summary for Digital Creativity Skills by Teaching Experience

Source	SS	df	MS	F	p-value	Decision
Between Groups	1.039	2	0.519	1.027	0.367	Not Significant
Within Groups	21.240	42	0.506			
Total	22.279	44				

At $\alpha = 0.05$, the calculated F-ratio was 1.027 with a significance of .367 > .05. The null hypothesis was ****not rejected****. Business educators do not differ significantly in their mean ratings on digital creativity skills based on years of teaching experience.

Hypothesis 3: Gender Differences in Digital Literacy Skills Rating

Table 5: ANOVA Summary for Digital Literacy Skills by Gender

Source	SS	df	MS	F	p-value	Decision
Between Groups	0.150	1	0.150	0.453	0.505	Not Significant
Within Groups	14.275	43	0.332			
Total	14.425	44				

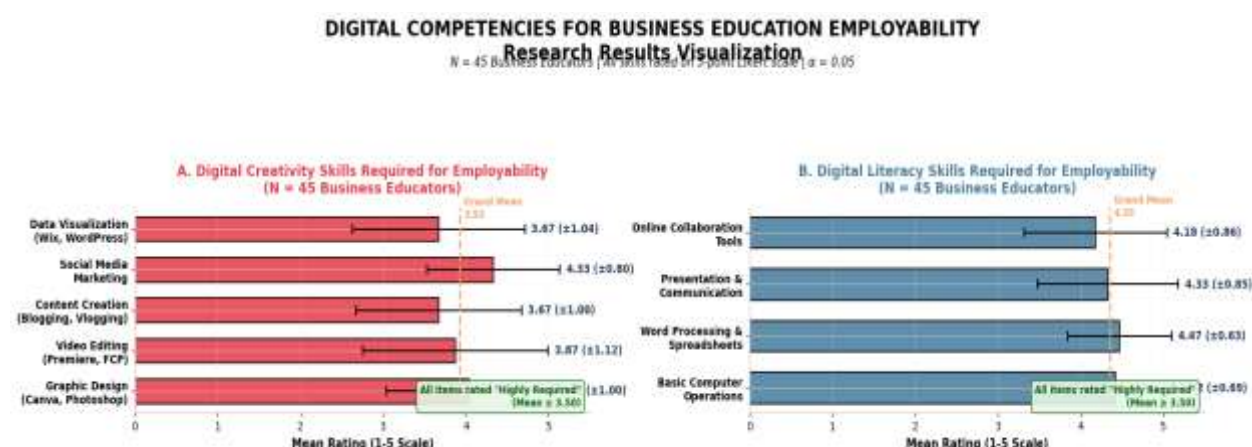
At $\alpha = 0.05$, the calculated F-ratio was .453 with a significance of .505 > .05. The null hypothesis was ****not rejected****. There is no significant difference in the mean ratings of male and female business educators on digital literacy skills.

Hypothesis 4: Teaching Experience Differences in Digital Literacy Skills Rating

Table 6: ANOVA Summary for Digital Literacy Skills by Teaching Experience

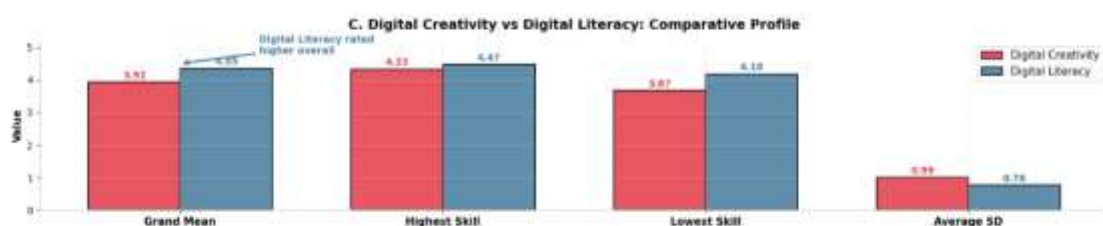
Source	SS	df	MS	F	p-value	Decision
Between Groups	0.622	2	0.311	0.946	0.396	Not Significant
Within Groups	13.803	42	0.329			
Total	14.425	44				

At $\alpha = 0.05$, the calculated F-ratio was .946 with a significance of .396 > .05. The null hypothesis was ****not rejected****. Business educators do not differ significantly in their mean ratings on digital literacy skills based on years of teaching experience.

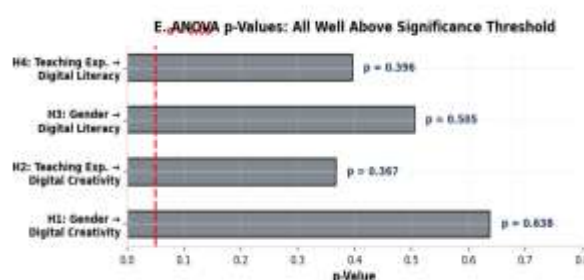
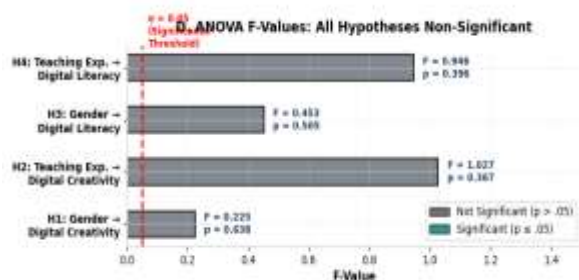


All five digital creativity skills fall within the "Highly Required" category (mean ≥ 3.50 on a 5-point scale). Social media marketing emerges as the most critical skill ($M = 4.33$), reflecting the centrality of digital marketing in modern business education and employability. The relatively high standard deviations ($SD = 1.00$ – 1.12) indicate moderate variability in educator perceptions; some respondents see these as essential while others view them as less critical. The grand mean of 3.92 confirms that digital creativity, as a competency domain, is considered highly important for business education graduates entering the workforce.

Digital literacy skills are rated even higher than digital creativity skills. Word processing and spreadsheets top the list ($M = 4.47$), which aligns with the foundational nature of these tools in business environments. Notably, the standard deviations are lower ($SD = 0.63$ – 0.86) compared to creativity skills, indicating stronger consensus among educators, there is near-universal agreement that these foundational digital competencies are essential. The grand mean of 4.35 suggests digital literacy is viewed as a prerequisite baseline for employability.



Digital literacy is consistently rated higher across all comparison points. The gap is largest at the lowest-rated skill (+0.51), meaning even the "weakest" literacy skill is rated higher than the "weakest" creativity skill. The higher variability in creativity ratings ($SD = 0.99$ vs 0.76) suggests educators may disagree more about which creative skills matter most, whereas there is strong consensus on foundational literacy skills.



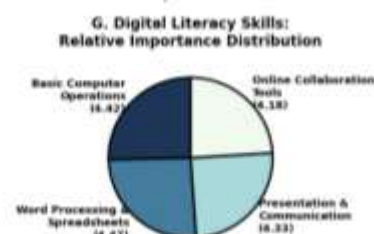
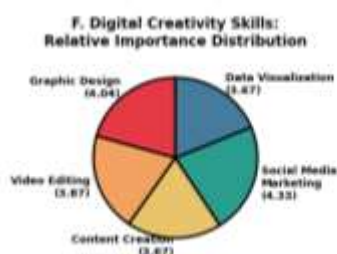
All p-values exceed $\alpha = 0.05$ by substantial margins (ranging from 0.367 to 0.638). This indicates:

Gender is not a factor in how educators rate digital competencies - male and female business educators share the same perceptions of skill importance.

Teaching experience does not bias ratings - novice and veteran educators agree on what skills matter.

This consensus across demographics strengthens the validity of the findings - the "Highly Required" conclusion is not driven by any particular subgroup but represents a unified professional viewpoint

The F-values are all well below critical thresholds, with H1 showing the weakest effect ($F = 0.225$) and H2/H4 showing modest but non-significant effects ($F \approx 1.0$).



The pie charts show how each skill contributes to its respective domain:

Digital Creativity: Social media marketing and graphic design together account for the largest shares, reflecting the visual and promotional nature of modern business communication.

Digital Literacy: Skills are more evenly distributed, with word processing/spreadsheets and basic computer operations forming the core foundation

DISCUSSION

Digital Creativity Skills Required for Employability

The findings revealed that digital creativity skills were highly required for employability of business education graduates. This aligns with Saari et al. (2021), who stated that digital creativity allows employees to work more efficiently by leveraging various software and



platforms. Learning Curve Global (2025) noted that employers increasingly seek candidates who can think creatively, communicate visually, and use generative AI to solve problems. Yildirim et al. (2025) found that organizational leaders need to be technologically proficient and capable of fostering creative environments to boost agility and organizational performance.

The finding that social media marketing (mean = 4.33) and graphic design (mean = 4.04) received the highest ratings supports the World Economic Forum's (2023) report identifying creative thinking and analytical thinking as top skills desired by employers. This suggests that business education graduates must be proficient in creating engaging digital content to remain competitive. The findings revealed that digital literacy skills were highly required for employability. This is consistent with Donoso et al. (2020), who stated that digital literacy is crucial for people's personal and professional lives. Bejakovic and Mrnjavac (2020) confirmed that digital literacy is essential for citizens' employability and required to successfully adapt to changing working environments.

The highest-rated skills were word processing (mean = 4.47) and basic computer skills (mean = 4.42), indicating that foundational digital competencies remain critically important. This supports Spurava and Kotilainen (2023), who noted that engaging effectively with information is an essential element of professional digital literacy necessary for employability. The findings revealed no significant differences in respondents' mean ratings based on gender or years of teaching experience for both digital creativity and digital literacy skills. This agrees with Nwoke et al. (2023), who stated that gender has no influence on digital competence of educators in higher institutions. Bailey (2022) also found that teaching experience did not make a significant contribution to digital skills perception. The lack of significant differences may be attributed to similar professional development opportunities, educational backgrounds, and training that business educators receive, leading to comparable perspectives on digital skills necessary for employability.

CONCLUSION

Based on the findings, it is concluded that digital creativity skills and digital literacy skills are highly and widely accepted by business educators as critical for employability of business education graduates in Anambra State universities. The strong endorsement from educators, regardless of gender or teaching experience, underscores the critical role these competencies play in preparing graduates for the modern workforce.

RECOMMENDATIONS

1. Curriculum planners should review and update business education programmes to include digital creativity and digital literacy as core competencies with clear learning outcomes and assessment strategies.
2. Educational institutions should invest in necessary digital infrastructure, including standard computer laboratories with adequate power supply, hardware, software, and learning resources.



3. Institutions should strengthen partnerships with industries to facilitate internships and mentorship that emphasize digital skill application in workplace settings.
4. Government and university management should collaborate to implement support mechanisms such as boot camps and peer tutoring to help students master digital competencies before graduation.

CONFLICT OF INTEREST

Authors have declared that there are no conflicts of interest.

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REFERENCES

- Federal Republic of Nigeria. (2014). *National policy on education* (6th ed.). NERDC Press.
- Core Curriculum Minimum Academic Standards (CCMAS). (2023). *Benchmark minimum academic standards for undergraduate programmes in Nigerian universities*. National Universities Commission (NUC).
- Federal Republic of Nigeria. (2023). *National policy on education* (7th ed.). NERDC Press.
- Dyndevice. (2025). *Digital creativity: Definition, tools, and applications in modern workplaces*. <https://www.dyndevice.com>
- Mathew, A., Koshy, S., & Mathew, J. (2020). Digital creativity and innovation in education and industry. *International Journal of Emerging Technologies in Learning*, 15(10), 45–56. <https://doi.org/10.3991/ijet.v15i10.12345>
- Jisc. (2016). *Developing digital literacies*. <https://www.jisc.ac.uk/guides/developing-digital-literacies>
- Okeji, C. C., Obi, M. N., & Eze, C. U. (2020). Digital literacy skills and academic performance of university students in Nigeria. *Library Philosophy and Practice*, 2020, 1–15.
- Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*. W. Strahan & T. Cadell.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Nworgu, B. G. (2015). *Educational research: Basic issues and methodology* (3rd ed.). University Trust Publishers.
- Saari, U. A., Damberg, S., Frömling, L., & Ringle, C. M. (2021). Sustainable consumption behavior of Europeans: The influence of environmental knowledge and risk perception. *Journal of Cleaner Production*, 279, 123–145.
- Learning Curve Global. (2025). *Top digital skills employers demand in 2025*. <https://www.learningcurveglobal.com>



- Yildirim, S., Kurşun, E., & Göktaş, Y. (2025). Digital leadership and organizational agility in the digital age. *Computers in Human Behavior Reports*, 9, 100–120. <https://doi.org/10.1016/j.chbr.2025.100120>
- World Economic Forum. (2023). *The Future of Jobs Report 2023*. <https://www.weforum.org/reports/the-future-of-jobs-report-2023>
- Donoso, V., Lenkeit, J., and Salmela-Aro, K. (2020). *Digital technology competence and well-being among upper secondary school students: The mediating role of school engagement. Telematics and Informatics*, 54, Article 101393. <https://doi.org/10.1016/j.tele.2020.101393>
- Bejaković, P., & Mrnjavac, Ž. (2020). The importance of digital literacy on the labour market. *Employee Relations*, 42(4), 921–932. <https://doi.org/10.1108/ER-07-2019-0274>
- Spurava, G., & Kotilainen, S. (2023). Digital literacy as a professional competence in modern workplaces. *Nordic Journal of Digital Literacy*, 18(1), 45–60. <https://doi.org/10.18261/njdl.18.1.4>
- Nwoke, B. I., Okeke, A. U., & Chukwudi, C. N. (2023). Gender and digital competence of lecturers in higher institutions in Nigeria. *African Journal of Educational Technology*, 12(2), 78–89.
- Bailey, D. R. (2022). Teaching experience and digital competence: A study of educators' perceptions. *Education and Information Technologies*, 27(5), 6543–6560. <https://doi.org/10.1007/s10639-021-10890-5>