# CAPACITY BUILDING INDEX OF LECTURERS AND STRATEGIES FOR EFFECTIVE ADULT EDUCATION PROGRAMMES IN THE ERA OF TECHNOLOGICAL INNOVATION IN SOUTH-EAST NIGERIA

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ABSTRACT: Constant advancement in technology demands that all users upgrade their competence for relevance. In most cases, the degree and the strategies needed for such upgrading are usually lacking to guide one's effort against waste of resources, energy and time. This research studied capacity building index of lecturers and strategies for effective adult education programmes in the era of technological innovation in South-East Nigeria. Four objectives guided the study which made use of survey research design. The population for the study was 56 lecturers of adult education in universities in South East Nigeria. A 54-item questionnaire was used for data collection. The instrument was validated by three experts. Cronbach Alpha reliability coefficient of .76 was obtained as the internal consistency of the questionnaire items. The findings revealed that lecturers of Adult Education needed capacity building in operating computer, uploading of text on Internet, the use of interactive white-board for teaching and learning and videoconferencing for effective adult education programme in the era of technological innovation in South-East, Nigeria. The findings also revealed 10 strategies that could be adopted by lecturers for effective adult education programmes in the era of technological innovation. It is recommended that the findings of this study be packaged and used by Ministry of Education in Abia State for retraining lecturers of adult education through seminar, workshop or shot duration courses for effective service delivery in universities in South-East Nigeria.

Keywords: capacity building, lecturers, strategies, adult education and technological innovation

The world has declared war against illiteracy with accessible moderate education identified as a vitally important objective (Lincoln 2017). Given the rapid growth of global technology usage, the broad problem of illiteracy is significantly compounded by technological illiteracy among adults. Since the adoption of the universal declaration of human rights on the 10th December, 1945, by the General Assembly of the United Nations (Nwafor & Agi, 2013), there has been increasing awareness of and emphasis on the eradication of illiteracy. However, despite global consensus with iwe's 919780 assertion that everyone has the right to education, UNESCO (2002) estimates that there are over 850 million illiterate persons in the world today, constituting 275 of the adult population over 15 years of age in developing countries.

World Education Forum, held in Dakar, endorsed six goals for ensuring that both youth and adults can equitably access appropriate learning and life skills programmes and, overall, for achieving a 505 improvement in adult literacy levels by 2015, especially for women, (UNESCO, 2005). The inclusion of adult education in Nigeria's National Policy on Education shows that Africa has been making concerted effort towards achievement of the six goals but all seems not to be effective. This is evidenced in UNESCO's (2005) African literacy study findings which disclosed that Nigeria's literacy stands at 49%; other countries with high rates include - South Africa (84%), Kenya (79%), Cameroon (72%) and Ghana (68%). In the same vein, World Bank's Report (2010), affirmed that

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Nigeria's male adult literacy rate is 71.9% versus 28.1% of female adults. in these reports, literate adults are defined as – individuals who are 15 years or above, and who can read and write simple statements in their daily life activities. In acknowledgement, the movement to curb illiteracy among adults gave rise to adult and non-formal education globally, in a bid to accommodate both youth and adults who may not have the opportunity to attend formal education.

# Adult Education and Technology in Southeast Nigeria

Akinpelu (2011) described non-formal education as a form of education carried out in a more flexible manner, where learners dictates the contents, curriculum, and location of studies. This type of education is spelled out in the National Policy on Education (2004) as one "that encompasses all forms of functional education given to youths and adults outside the formal school system, such as functional literacy, continuing and vocational education". Adult Education cuts across all aspects of educational activities be they formal, non-formal, semi-formal or informal modes of learning.

# **Roles and Instructional Responsibilities**

A lecturer in the statement of Encarta (2009) is a teacher in a college or university that teaches students and carries out research activities. The National Policy on Education (2004) defines a lecturer as a person who had undergone approved professional training in education at appropriate levels and is capable of imparting knowledge, skills and attitudes to learners. Isiwu and Okonkwo (2013) describe lecturers as individuals who have completed a teacher preparatory programme in the university and obtained a teaching role with the responsibility of imparting knowledge, skills and attitudes to students in a specific subject. In the context of this study's focus on adult education lecturers in Southeast Nigeria, we draw on the aforementioned sources in defining lecturers as individuals with university training in the pedagogical and technical aspects of adult education programmes and who teaching relevant courses in a university or college of education. It is the responsibility of the lecturers to teach students and carry out research activities in adult education in order to contribute to the growth and development of the country. Ogwo and Oranu (2005) cautioned that for a teacher to be relevant in their profession, they need to consistently update their knowledge and skills both in subject matter and pedagogy especially given the demands of Southeast Nigeria's technology landscape. According to Nwabuko, (2004), one of the obstacles impeding adult education objectives is the inability of the adult educators (lecturers) to remain current and effective in light of fast-changing technology requirements.

### The Role of Technology in Adult Education Instruction

Technological innovation refers to changes in technology and how they are embedded successfully in services, processes and products in any discipline, including adult education. In the context of this study, we use the term, technological innovation to refer to the generation and/or application of new ideas, *based on technology, capability or knowledge* for effective implementation of adult and non-formal education programmes

in Southeast, Nigeria. In adult and non-formal education programmes, technological innovation is cornerstone for research, design, development, planning, implementation and evaluation of adult education instruction. This is why lecturers are expected to continuously advance their knowledge and methods of instructional delivery; it is especially important to keep current with Southeast Nigeria's rapid changes in technology. In adult and non-formal education, the most prominent technological innovation concerning computer usage and applications is Information and Communication Technology (ICT).

Mikre (2011) posits that the impact of ICT is more pronounced in education because it provides opportunities for both learners and teachers to adapt teaching and learning processes based on individual needs and to eliminate barriers posed by space and time. In Chhabra's (2014) perspective, ICT serves as a veritable instrument that fast-tracks a rapid transition from the traditional learning environment, centered on teachers and book into a learner-centered learning environment. The UNESCO Institute for Statistics (2012) reported that the adoption of ICT in education has a multiplier effect in the system, especially in the areas of enhancing teaching-learning process and providing learners with a new set of skills to make them globally competitive. it also indicates that ICT can facilitate and improve the training of teachers while minimizing cost associated with the conventional instruction, which ultimately lead to better overall educational attainment.

However, Nwabuko (2004) cautions many obstacles have continued to make the realization of the adult education objectives unattainable. Such barriers include the application of ICT by teachers in adult education programmes in this technological era. This implies that there is need for capacity building of lecturers for effective adult education in this era of technological innovations.

### A Survey of Instructional Capacity Building for Technological Competency

### Framework

Capacity building as described by Stavrons (1998), is the process of developing competencies and capabilities in individuals, groups, organization sectors or countries that leads to sustainable and self-generating performance improvement. Its fundamental goal is to enhance individuals' ability based on perceived needs. In the context of this technology-focused study, we frame capacity building as efforts-geared towards improving competencies of lecturers for effective adult education to meet the demands of Southeast Nigeria's technological era. In order to successfully improve the capacity of the lecturers through strategic effort, energy, time and cost, there is need to ascertain the competencies they possess in the use of ICT, especially the use of computer for skills ranging from instruction through assessment.

To improve the capacity of the lecturers, it is necessary to determine their capacity building index through assessment so as to avoid waste of effort, time and cost of both material and human resources in operating computer, using internet and video conferencing.

With regards to this study, we indentify assessment as the process of evaluating lecturers of adult education in universities that run adult education programmes. In order to assess lecturer needs, this study employed a descriptive survey design to facilitate through data collection geared toward estimating the level of competencies that participating lecturers possessed in operating computers, using the internet and video conferencing for effective instructional delivery. The goal of this survey-based assessment of lecturer capacity needs was to elicit a better understanding of the need gap among the lecturers for capacity building.

Roset and Sheldon (2001) viewed need gap as the difference between the perceived need and actual need of a worker. In this study, the difference between the perceived level of competencies possessed by lecturers and what they required to meet standard of acceptable performance constitute the capacity building index (need) which in turn contributes to an understanding of how they can be filled through different technology strategies.

Asogwa (2017) argued that strategies are careful devised plan of action or the art of carrying out such plan to achieve a goal. In this study, strategy refers to plans of action that could be taken by lecturers to advance their capacity for facilitating effective adult education programmes in the era of technological innovation in Southeast, Nigeria.

## **Study Purpose**

The purpose of this study was to determine the capacity building index of adult education lecturers and strategies for ensuring more effective adult education programmes that meet Southeast Nigeria's technology innovation demands. Specifically, the study was designed to determine the following:

- Capacity building index of lecturers in operating computer for effective adult education programmes in the era of technological innovation in Southeast Nigeria;
- 2. Capacity building index of lecturers in up-loading e-book to (up-loading text internet) for effective adult education programmes in the era of technological innovation in Southeast Nigeria;
- 3. Capacity building index of lecturers in video conferencing for effective adult education programmes in the era of technological innovation in Southeast Nigeria; and
- 4. Lecturers' capacity building strategies for effective adult education programmes in the era of technological innovation in Southeast Nigeria.

### **Research Questions**

Four survey research questions were designed to elicit need gap and capacity building information from study participants:

1. What are the capacity building index of lecturers in operating computer for effective Adult education programmes in the era of technological innovation in Southeast Nigeria?

- 2. What are the capacity building index of lecturers in up-loading e-book to (up-loading text internet) for effective Adult education programmes in the era of technological innovation in Southeast Nigeria?
- 3. What are the capacity building index of lecturers in video conferencing for effective Adult education programmes in the era of technological innovation in Southeast Nigeria?
- 4. What are the lecturers' capacity building strategies for effective Adult education programmes in the era of technological innovation in Southeast Nigeria?

# Methodology

The study adopted descriptive survey research design. This design is suitable for the study because it made use of a questionnaire to collect information from a population upon which the findings were generalized. The study was carried out in the South-eastern states of Nigeria. The study population comprised 56 lecturers of adult education in 5 universities, (three federal and two state universities). There was no sampling because the entire lecturer population across all five universities was involved in the study.

The instrument for data collection was 65 - item questionnaire entitled: Adult Education Lecturers Competency Capacity Building Index and Strategies Questionnaire (AELCCBISQ), which was developed by the researchers and grounded review of relevant literature. The questionnaire was divided into two components: capacity building and strategies. The capacity building component was further divided into needed and performance categories. The needed component was assigned four point response options of Highly Needed (4), Average Needed (3), Slightly Needed (2), and Not Needed (1), while the performance component was assigned a four point response options of Highly Performance (HP), Average Performance (AV), Low Performance (LP), and No Performance (NP), with corresponding values of 4, 3, 2, and 1 respectively. The lecturers of adult education responded to both categories, indicating which each item is needed by their adult education programmes and the level at which they could perform the item in their instructional contexts.

The strategies component was structured on four-point rating scale of Strongly Agree, Agree, Disagree and Strongly Disagree with corresponding scale of 4, 3, 2, and 1 respectively. Three experts validated the instrument, two from the field of adult education and one from the field of measurement and evaluation, all three consultants are affiliated with from Michael Okpara University of Agriculture, Umudike. There was no item mortality or mobility recommended in their review, but there were restructuring and rearrangement of items and grammatical corrections. Their corrections and suggestions were used to develop the final copy of the instrument. Fifteen additional copies of the questionnaire were administered to a supplementary group of 15 lecturers of adult education in South-South universities who were not part of the study but had similar characteristics due to training and practice. The Cronbach alpha method was used to estimate the internal consistence of the questionnaire items. Reliability coefficients of .77 and .84 were obtained which means that the instrument was reliable for the study.

Fifty-six copies of the questionnaire were administered to the 56 respondents on a one to one basis in their respective universities by the researcher and three research assistants.

E-mail addresses of the lecturers were collected, and copies of the questionnaire were mailed to those who could not check the questionnaire for immediate collection during the administration as a follow-up. All the copies of the questionnaire were collected, achieving a 100% retrieval rate. The data was analyzed using the Capacity Building Index (CBI) to answer the research questions 1 to 3 and an arithmetic mean to answer the research question 4. To determine the capacity building index of the lecturers, the following steps were taken:

- 1. The weighted mean of each item under the need category which is  $X_n$  was calculated.
- 2. The weighted mean of each item under the performance category which is  $X_p$  was calculated.
- 3. The difference between the two weighted mean for each item  $(X_n-X_p=CBI)$  was determined.
- 4. Where the difference (CBI) was zero (0) for each item, there was no need for capacity building because the level at which the skill item was needed was equal to the level at which the lecturers could perform the skill.
- 5. Where the difference (CBI) was negative (-) for each item, there was no need for capacity building because the level at which the skill item was needed was lower than the level at which the lecturers could perform the skill.
- 6. Where the difference (CBI) was positive (+) for each item the lecturers needed capacity building because the level at which the skill item was needed was higher than the level at which the lecturers could perform the skill.

# **Findings**

The following study results elicited from participant responses to the research questions and were hypothesis tested.

**Table 1**CBI-Analysis of lecturers in operating computer for effective adult education programmes

S/N	Competency item statement (ability to):	Xn	Xp	X <sub>n</sub> -X <sub>p</sub> (CBI)	p-value	Remark
1.	Position computer and its accessories on a comfortable desk or table	3.19	3.24	02	.05	CBNN
2.	Connect computer to the accessories with cables appropriately	3.62	3.12	.50	1.00	CBN
3.	Connect computer and accessories to power supply	3.47	2.32	1.15	.30	CBN
4.	Boot on the computer and switch on the accessories	3.61	2.90	.71	.06	CBN
5.	Take a comfortable sitting position close to the keyboard	3.56	3.19	.37	.08	CBN
6.	Take cursor to the start menu.	3.62	2.51	1.11	.08	CBN
7.	Click to open programmes from the start menu	3.73	3.45	.30	.20	CBN

8.	Extend hand straight to the keyboard and let fingers lightly touch the home row and keys	3.55	3.01	.54	.16	CBN
9.	Create a document from the Microsoft office	3.78	3.38	.40	.05	CBN
10.	Stroke the keys and the space bar with finger tips to type alphabet	3.65	2.05	1.23	.12	CBN
11.	Edit text using cursor movement, key page up and down, alpha numerical	3.86	2.23	.63	.19	CBN
12.	Create a file or folder	3.51	3.12	.39	.07	CBN
13.	Save the text in file or folder	3.56	2.88	.68	.05	CBN
14.	Insert CD plate or flash drive in the appropriate opening	3.79	3.50	.28	.15	CBN
15.	Format CD plate or flash drive	3.67	3.34	.30	.10	CBN
16.	Save/transfer text from the folder to the storage facility	3.67	3.34	.33	.06	CBN
17.	Close the file or folder after use	3.56	3.32	.24	.13	CBN
18.	Short down computer after use.	3.76	3.44	.30	1.04	CBN
19.	Switch of all the accessories	3.55	3.22	.33	.07	CBN
20.	Disengage computer and accessories from power supply	3.89	2.79	1.10	.17	CBN

 $<sup>^{</sup>a}n = 56$ 

Table 1 shows that the capacity building index of 19 out of 20 items ranged from 0.24 to 1.23 and were positive. This indicated that the lecturers of adult education need capacity building in the 19 skill items in operating computer for effective adult education programmes in the era of technological innovation in South-East Nigeria. One out of the 20 items had a capacity building index of -.02 and were negative, indicating that the lecturers do not need capacity building on the item because the level at which the item is needed was lower than the level at which the lecturers could perform the item for effective adult education programmes in the era of technological innovation in Southeast Nigeria.

 Table 2

 CBI-Analysis of lecturers in using internet for effective Adult Education programme

S/N	Competency item statement	Xn	Xp	X <sub>n</sub> -X <sub>p</sub>	p-value	Remark
	(ability to):			(CBI)		
1.	Connect all necessary cables to computer including source of power supply	2.50	2.98	.62	.31	CBN
2.	Boot the computer correctly	3.98	3.60	.38	.07	CBNN
3.	Decide on how the material will be organized (e.g. title, subject matter, logical, numerical	3.60	3.11	.49	.09	CBN
4.	Create a temporary file/ folder by opening window explorer	3.60	2.02	1.65	1.00	CBN
5.	File the text pages in a folder appropriately	3.74	2.89	.57	.05	CBN

 $<sup>{}^{</sup>b}X_{n}$  = Mean of needed;  $X_{p}$  = Mean of performance; CBN = Capacity building needed, CBNN = Capacity building not needed.

6.	Connect computer to internet service provider	3.80	2.24	1.56	.21	CBNN
7.	Design web page for entering and formatting text, images, table and other features	3.94	2.31	1.63	.13	CBN
8.	Search for a good navigation system (search engine) that users can easily get from place to place.	3.56	2.02	1.54	.40	CBN
9.	Create a document from the Microsoft office to PDF	3.78	3.43	.25	.22	CBN
10.	Log on a programme on the internet to File Transfer Protocol (FTP) address and login permission	3.78	2.00	1.78	.07	CBN
11.	Send transfer/text from folder to on line location using identified search engine.	3.66	2.05	1.06	1.02	CBN
12.	Down-load the text to ensure accurate/effective uploading	3.54	3.25	.29	.18	CBN
13.	Edit/change configuration of local site if need be	3.78	2.28	.50	.12	CBN
14.	Disconnect from search engine on the internet.	3.67	3.21	.40	.26	CBN

 $<sup>^{</sup>a}n = 56$ 

Table 2 revealed that the capacity building index of twelve items ranged from 0.25 to 0.78 and were positive, while two items were negative. This indicated that the lecturers of Adult education need capacity building in the twelve competency items in using internet for effective Adult education programmes in the era of technological innovation in Southeast Nigeria.

**Table 3**  $CBI-Analysis\ of\ lecturers\ in\ video\ conferencing\ for\ effective\ Adult\ Education\ programme\ (N=56)$ 

S/N	Competency item statement (ability to):	Xn	Xp	X <sub>n</sub> -X <sub>p</sub> (CBI)	p-value	Remark
1.	Choose a software programme for the video conferencing such as Logitech Quick Cam Camera software, Microsoft or Microsoft instant messenger friend finders.	3.59	1.23	2.36	1.16	CBN
2.	Install video conferencing programme in the computer appropriately	3.66	2.06	1.60	.10	CBN
3.	Connect computer to Internet/go on line	3.86	2.23	1.63	.23	CBN
4.	Click the start menu to locate the installed programme	3.56	2.05	1.51	.09	CBN
5.	Start the instant messenger (installed video conferencing programme)	3.56	2.04	1.52	.05	CBN
6.	Search for friends online to connect for testing.	3.61	2.97	.64	.07	CBN

 $<sup>{}^{</sup>b}X_{n}$  = Mean of needed;  $X_{p}$  = Mean of performance; CBN = Capacity building needed, CBNN = Capacity building not needed.

7.	Schedule time table for video conferencing with students/learners	3.50	3.02	.48	.07	CBN
8.	Start video conferencing at the appropriate time as scheduled	3.45	2.65	1.41	.04	CBN
9.	Close programmes at the end of the conference	3.56	3.21	.35	.17	CBN
10.	Disconnect from the internet service provider after teaching.	3.65	3.10	.55	.12	CBN
11.	Shut down computer and disengage from power supply.	3.78	3.03	.75	.06	CBN

 $<sup>^{</sup>a}n = 56$ 

Table 3 illustrates that the capacity building index of Adult education lecturers all 11 items ranged from .35 to 2.36 and is positive. This indicates that the lecturers needed capacity building in the 11 skill items related to video conferencing.

**Table** 4

CBI-Analysis of lecturers' competency capacity building strategies for effective Adult Education programme

S/N	Teachers' strategies	X	S	Sig.	Remark
1.	Attending workshops or seminars training for capacity building	3.81	.38	.07	A, NS
2.	Enrolling for short duration courses in computer operation for capacity building	3.45	.55	.16	A, NS
3.	Purchasing and using personal computer for instruction	2.70	.71	.25	A, NS
4.	Using Cyber café for instructional preparation and delivery	3.00	.25	.32	A, NS
5.	Partnering with technical staff in the university during computer instruction	3.32	.47	.08	A, NS
6.	Working with computer- literate colleagues	2.98	.65	.09	A, NS
7.	Involving students that are computer literate during computer instruction	3.03	.73	.14	A, NS
8.	Polling computer resources together by lecturers	3.38	.74	.08	A, NS
9.	Creating and managing interfaces to partner with ICT companies	3.49	.63	.06	A, NS
10.	Improvising computer facilities that are not available in school	3.57	.70	.39	A, NS

a n = 56

The data in Table 4 shows that all the 10 items had their mean rating ranged from 2.70 to 3.81, which is above the cut-off point of 2.50. This indicates that the respondents agreed that all the 10 items were the capacity building strategies that could be adopted by lecturers for effective Adult education programme. The standard deviation of all the 10 items ranged from .25 to .74, which showed that the respondents were not too far from the mean. The opinion of one another in their responses on the capacity building strategies that could be adopted by lecturers for effective Adult education programme.

 $<sup>{}^{</sup>b}X_{n}$  = Mean of needed;  $X_{p}$  =Mean of performance; CBN = Capacity building needed, CBNN = Capacity building not needed.

A = Agreed, NS = Not Significant

#### **Discussion**

The findings shown in Table 1 demonstrate that lecturers of Adult education need capacity building in 19 competencies for operating computers more effectively in order to keep current in Southeast Nigeria's rapidly growing technology landscape. This is in consonance with Miller, Bakare and Ikatule's (2010) findings on professional capacity building needs among junior secondary school teachers in Lagos State with regard to effectively facilitating the technology curriculum. they found that teachers needed basic technology instruction capacity building in five skills in planning; six skills in implementing; six skills in evaluating instruction; six skills in programme management; 14 skills in classroom/laboratory management and 29 skills in teaching basic technology curriculum contents.

Table 2 shows that the lecturers of Adult education lecturers need capacity building in 12 competencies for using the Internet effectively. This finding is in alignment with Olaitan, Osinem, Honyonyon, and Akeju (2008) who found that lecturers required performance competencies in using computers for teaching Agriculture topics, particularly general computer operation and using the Internet, e-mail, and Microsoft Power Point to facilitate instruction.

Similarly, Eze and Olaitan (2009) conducted a study of the requisite skills required for capacity building of agriculture teachers in Southeastern Nigeria's colleges of education for more effectively teaching yam production, with findings in the following areas: instructors needed capacity building in nine skills in each pre-planting and planting operations; 16 skills in post-planting operation; 13 in processing and storage; and 15 in teaching students. These findings, along with similar studies in the literature, contribute to the relevance and importance of the present study.

The findings illustrated in Table 3 indicated that lecturers of Adult education need capacity building in 11 video conferencing competencies. This finding contradicts Richard's (2017) suggestion that some of the most effective video conferencing programmes include Join.Me, Citrix GoToMeeting, Google Hangouts for Video, AnyMeeting and Cisco Webex. However, ezTalks (2018) supported that it is best to set up and test the microphones with friends before the time of the meeting, and also ensure that the video communication programmes are configured correctly in order to avoid disruptions in the middle of the conference. Similarly, Allen (2018) suggested that successful video conference skills are knowing where to look, using a remote, and keeping still, among others.

Table 4 demonstrates that there are 10 capacity building strategies that can be adopted by lecturers to improve for Adult education programme effectiveness. The strategies include attending workshops or seminars training for capacity building, enrolling for short duration courses in computer operation for capacity building and purchasing, and using personal computer and projectors for instruction. These findings support Kulwart's (2000) assertion that the vast reservoir of human talents could be harnessed to achieve industrial objective through developmental training programmes. Relatedly, Onah and

Okoro (2010) found that management strategies entail planning, controlling and organizing seminars and workshops to help people manage something. Ekpiken (2015), similarly recommended that for human capacity development to succeed, higher education instructors should be exposed to continuous professional development and training programmes to enable greater productivity and adaptation to the changing world of teaching and research contexts, especially given the highly competitive globalized economy. The present study findings align with this literature validity to result of this study.

### Conclusion

Across the globe, continuous technological innovation increasingly threatens our technology competencies with obsolescence. Any technological innovation that creates a gap in prospective users' knowledge has to be filled in order to maintain successful fulfillment of their individual and professional requirements. This situation is magnified in the educational sector, including Adult education. This study affirms the need for lecturers' constant technological competency up-grade to ensure consistently effective delivery. The use of computers and associated technologies in the teaching profession, especially Internet navigation, projector usage, and video conferencing, created a lacuna in the competence of Adult education lecturers, but the extent of such discrepancies in Southeast Nigeria and the relevant strategies to overcome the gap was little known. In response, this survey-based study was conducted to establish a capacity building index of Southeast Nigerian Adult education lecturer competency and elicit strategies for making Adult education programme instructions more effective. Findings confirm that Adult education lecturers need capacity building in 19 competencies in operating computers, 12 competencies in using the Internet, and 11 competencies in video conferencing. Finally, the study suggests 10 capacity building strategies that could be adopted by lecturers in order to improve their skills and sustain the relevance and effectiveness of Adult education programmes in the context of Southeastern Nigeria's era of technological innovation. The following four recommendations distill key strategies:

### Recommendations

- 1. Lecturers of Adult education programmes in universities should utilize the findings of this study to seek sponsorship from their administrators in order to attend re-training programme in computer practices.
- 2. University administrators should utilize the findings of this study to approve requests from the lecturers for sponsorship in order to participate in re-training programme that equip them for effective instruction that meets the needs of Southeast Nigeria's rapidly growing technology demands.
- 3. University administrators should utilize the findings of this study to organize internal workshops for re-training of the lecturers, with a focus on innovative computer usage.
- 4. The National University Commission should sponsor a wider research on the capacity building index of lecturers of Adult education programmes in universities, with a focus on generating data regarding economic and instructional upgrades.

5. Countries that have similar problems can also adopt prior four recommendations to their national and regional education contexts and needs.

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