Availability and Adequacy of ICT Tools for Teaching Arabic in Colleges of Education, North-central Nigeria

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Abstract:
Arabic language is used to access information on the Internet, just like other languages. Its teaching-learning could be enhanced through the use of Information and Communication Technology tools. The inadequate availability as well as the lackadaisical attitude of some teachers to the use of ICT tools in some educational institutions are reported in some works. This study aimed at investigating the level of availability and adequacy of ICT tools for teaching Arabic Language in Colleges of Education in North-central, Nigeria. This study was a descriptive survey research type. The target population and sample consisted of all the 75 lecturers of Arabic in the 15 Colleges of Education in the North-central. The study sample was purposively drawn from the colleges where Arabic was taught. A researcher-developed questionnaire with reliability index of 0.78 was used for data collection. The percentage, One-way Analysis of Variance and the t-test were used for data analysis at 0.05 level of significance. The findings of the study were: out of 23 ICT tools assessed, 14(60.9%) were available 9(39.1%) were not available; 11(47.8%) were adequate 12(52.2%) were not adequate. The study recommended that the government and private proprietors should intervene in the procurement of unavailable ICT tools.
Keywords: *Education, Arabic, Available, Adequacy, ICT Tools*

Abstrak:
Bahasa Arab digunakan untuk mengakses informasi di Internet, sama seperti bahasa lainnya. Pengajaran-pembelajarannya dapat ditingkatkan melalui penggunaan alat-alat Teknologi Informasi dan Komunikasi. Ketersediaan yang tidak memadai serta sikap acuh tak acuh dari beberapa guru terhadap penggunaan alat-alat TIK di beberapa lembaga pendidikan dilaporkan dalam beberapa karya. Penelitian ini bertujuan untuk menyelidiki tingkat ketersediaan dan kecukupan alat-alat TIK untuk pengajaran Bahasa Arab di Sekolah Tinggi Pendidikan di Utara-tengah, Nigeria. Penelitian ini adalah jenis penelitian survei deskriptif. Populasi sasaran dan sampel terdiri dari semua 75 dosen bahasa Arab di 15 Sekolah Tinggi Pendidikan di Utara-tengah. Sampel penelitian secara sengaja diambil dari perguruan tinggi tempat bahasa Arab diajarkan. Kuesioner yang dikembangkan peneliti dengan indeks reliabilitas 0,78 digunakan untuk pengumpulan data. Persentase, Analisis Varians Satu Arah dan uji-t digunakan untuk analisis data pada tingkat signifikansi 0,05. Temuan penelitian ini adalah: dari 23 perangkat TIK yang dinilai, 14 (60,9%) tersedia, 9 (39,1%) tidak tersedia, 11 (47,8%) memadai, dan 12 (52,2%) tidak memadai. Penelitian ini merekomendasikan agar pemerintah dan pemilik swasta melakukan intervensi dalam pengadaan perangkat TIK yang tidak tersedia.
Kata Kunci: *Pendidikan, Bahasa Arab, Ketersediaan, Kecukupan, Alat TIK*

INTRODUCTION

Education is an empowering instrument for the continuous development of a society. Several definitions and descriptions have emerged with respect to the role of education in the progress and advancement of every nation. The Federal Republic of Nigeria (FRN) in the National Policy on Education (NPE, 2014) has described education as a backbone for the achievement of national goals and aims. Sequel to this, many fields of study have been highlighted by the Federal Government of Nigeria to be of importance. These include the Arts, the Sciences and the Social Sciences. Under the Arts are the languages, which include Nigerian languages (Hausa, Igbo and Yoruba), foreign languages (Arabic and French) and the official language (English language). The curriculum for each of these fields was designed in line with the three domains of educational taxonomy (Ughamadu, 1998 & Omoniyi, 2012).

Based on Bloom's taxonomy of education, human beings are expected to demonstrate abilities in the three domains of education, namely cognitive, affective and psychomotor domains. Each of the three domains of education is essential to learning. To assist learners to acquire knowledge, values, concepts and skills, it is necessary to integrate required information and communication technology (ICT) tools into the process of instructional delivery in Arabic classes. ICT tools, in the modern concept, are all electronic devices used for instruction. Any of the ICT tools employed for content delivery is, therefore, referred to as educational technology. Educational Technology, according to Mangal and Mangal (2014), is any device or tool used during instructional preparation, delivery and evaluation to bring about the set educational objectives. This study would discuss the ICT tools that are available and affordable for Arabic education in Nigeria.

The Arabic language predates the teaching of English language for a period not less than seven centuries in Nigeria (Galadanci, 1993; Sanni, 2011; AbdulRaheem, 2018). It is one of the formal school subjects taught from the basic to the tertiary levels of education as indicated in the National Policy on Education (NPE, 2014) of the Federal Republic of Nigeria (FRN). The NPE considers Arabic as an optional subject at the basic school level and as a field of study under the humanities at the senior secondary education level. Moreover, at the tertiary level, Arabic can be studied as one of the Arts subjects leading to the award of a degree of Bachelor of Arts, or in combination with Islamic Studies as double honours. It can also be studied with education to attain the Bachelor of Arts Education in Arabic. It can further be studied to the level of Masters' degree as either Master of Arts (M.A.) in Arabic Language or Arabic Literature at Faculty of Arts or Master of Education (M.Ed.) in Arabic at Faculty of Education. The Doctor of Philosophy (Ph.D.) degrees in Arabic Language or Arabic Literature at Faculty of Arts or Arabic Education at Faculty of Education are also attainable in various postgraduate schools of Nigerian Universities (Ishaq 2009; Sanni, 2011 & JAMB Brochure, 2019/2020).

At the formal settings, Arabic education is widely offered in many Private Arabic and Islamic Studies Schools (PAISS) across Nigeria. It is the main medium of instruction in this type of school settings. Arabic education has been in existence for many centuries before the advent of western education in Nigeria. It is on record that the spread of Islam, with the quest for knowledge of Islamic tenets which were originally Arabic-based, has aided the development of the Arabic curriculum in Nigeria since the late eleventh century (Galadanci, 1993; Al-kali, 2005; Ishaq, 2009 & Sanni, 2011). The place of ICT in teaching and learning processes in the contemporary period cannot be overemphasized. ICT tools

enhance the performances of both the teachers and the learners. On this note, several studies have been carried out on the roles of ICT tools in facilitating teaching and learning. What appears to be a lacuna as perceived by the present researcher is the fact that there are no enough empirical studies to concretely establish the relevant of ICT tools in Arabic language.

Statement of the Problem

Several studies have been carried out on ICT in relation to education at various locations in the world. For instance, Farell (2007) surveyed the ICT in education in Uganda and found that there is no differentiation in the factors affecting adoption and diffusion in every country, except with developmental degree of each country. Furthermore, Toro and Joshi's (2012) review on the ICT tools used in higher education in India from 2004-2011 revealed that before ICT tools could be used to enable meaningful delivery, the following major areas need to be emphasised: content/digital resources, monitoring and evaluation framework, implementation plans, financial allocations, political and administrate support, community demand for ICT, adoption and change in learning processes and staff development and training programmes. Opati (2013) researched into the use of ICT in teaching and learning at Makerere University, Uganda. He found that the use of ICT tools made the system of educational delivery to change as it enhanced teaching and learning in higher educational institutions.

Tella (2011) studied the availability and use of ICT in South-western Nigeria. His finding revealed that teacher education in Nigeria has a low usage of ICT gadgets. He observed that the non availability of ICT equipment was responsible for the lack of integration of ICT tools into instructional delivery. Issa, Ayodele, Abubakar and Aliyu (2011) conducted a study on the application of Information Technology to library services at the Federal University of Technology, Akure, Ondo State, Nigeria. Their outcome revealed several problems that affect the application of IT to service delivery at the Federal University of Technology Akure, such as inadequate funding, insufficient facilities and poor power supply, among others. Olokoba, Abdullahi and Omosidi (2014) studied the impact of Information Communication Technology on the management and performance of secondary school teachers in Kwara State, Nigeria. They found that there were no ICT facilities in some secondary schools, and some teachers were not even ready to use the available ICT tools for instructional delivery.

Furthermore, Apagu and Wakili. Toit (2015) investigated into teachers' training and usage of ICT in Education and found out that the use of ICT tools in classrooms would enhance teaching and learning and make teachers to be exposed. Almekhlafi's (2016) research on pre-service and in-service teachers' perceptions of the utility of e-learning digital collaboration tools for teaching and learning revealed that the in-service teachers showed more readiness than the pre-service teachers in the use of e-Learning digital platform. Moreover, Ishaq (2016) reported that the level of acquisition of ICT knowledge and skills by some senior secondary school Arabic teachers was high.

Nevertheless, the present study is deferent from aforementioned works in terms of locations, levels and subject's areas. Even though some of the works cited above have focused on the availability and utilisation of ICT in instructional delivery, none of them examined its availability and use in Arabic education. This is the gap the present study filled. The problem of this study is, therefore, to identify the levels of availability and use of ICT in the instructional delivery of Arabic education in North-Central Nigeria.

Research Questions
The following research questions were answered in the course of this research.
a) What are the available ICT tools for teaching Arabic in colleges of education in North-Central Nigerian?
b) Are the Arabic education ICT tools adequately provided?

RESEARCH METHOD

The geographical scope of this study comprised all the Colleges of Education that offer Arabic language across the North-Central zone of Nigeria including the Federal Capital Territory (FCT). All the lecturers of Arabic language were involved in the study. A questionnaire tagged "Availability and Adequacy of ICT Tools for teaching Arabic in Colleges of Education in the North-Central Nigeria (QAAITTACENCN)" was used to gather data. Percentage indices was employed to analyse the level of availability and adequacy of ICT tools for Teaching Arabic in Colleges of Education in the North-Central Nigeria.

Moreover, population of this study consisted of all Nigeria Colleges of Education Lecturers. The target population was all colleges of education lecturers in North-Central zone of Nigeria, which was selected from six states, namely Benue, Kogi, Kwara, Nasarawa, Niger, and Plateau including FCT-Abuja. The 75 lecturers of Arabic language in the 15 Colleges of Education in the North-Central Nigeria were the sample of this study. Purposive sample was drawn from the colleges where Arabic language education is run. Finally, all the lecturers from the purposively sampled colleges participated in the study.

FINDINGS AND DISCUSSION
Findings
Percentage was used to answer research questions A to E as shown in tables 5 to 10.
Research Question A: What ICT tools are available for teaching Arabic in colleges of education in North-Central Nigerian?

Table 1. Available of ICT Tools for Teaching Arabic in Colleges of Education in North-Central Nigerian

S/N	Items	Availability				
		A	%	N/A	%	Inferences
1	Radio	75	100.0	0	0.0	Available
2	Television	74	98.7	1	1.3	Available
3	Slide projector	75	100.0	0	0.0	Available
4	Opaque projector	10	13.3	65	86.7	Not Available
5	Overhead projector	69	92.0	6	8.0	Available
6	Motion pictures	71	94.7	4	5.3	Available
7	Tape recorder	75	100.0	0	0.0	Available
S/N	Items	A	%	N/A	%	Inferences
8	Audio-video recorder device	75	100.0	0	0.0	Available
9	Teaching machines	6	8.0	69	92.0	Not Available
10	Digital video camera	75	100.0	0	0.0	Available
11	Multimedia personal computer (PC)	75	100.0	0	0.0	Available
	Application software such as:					
12a	Word processing	66	88.0	9	12.0	Available
12b	Spreadsheets	43	57.3	32	42.7	Available

S/N	Items	A	%	N/A	%	Inferences
12c	Power-point simulation	81	81.3	14	18.7	Available
12d	Speed recognition	19	25.3	56	74.7	Not Available
13	Multimedia projector; Liquid crystal display (LCD) to communicate to large group	38	50.7	37	49.3	Available
14	Local area network (LAN)	12	16.0	63	84.0	Not Available
15	Metropolitan area network (MLN)	28	37.3	47	62.7	Not Available
16	Wide area network (WAN)	17	22.7	58	77.3	Not Available
17	Multimedia PC/laptop with video card and web camera or digital video camera	69	92.0	6	8.0	Available
18	Computer Database and data processing mechanism, CD ROM and DVD	70	93.3	5	6.7	Available
19	E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW)	55	73.3	20	26.7	Available
20	Hypermedia and Hypertext resources	6	8.0	69	92.0	Not Available
S/N	Items	A	%	N/A	%	Inferences
21	Computer-mediated conferencing-video and audio conferencing	8	10.7	67	89.3	Not Available
22	Video text, tele-text, interactive video disk (IVD), interactive remote instruction (IRI) and Cell phone	12	16.0	63	84.0	Not Available
23	Idea of virtual classroom	10	13.3	65	86.7	Not Available

Table 1 reveals that fourteen (14) out of the twenty-three (23) items that addressed the ICT tools were available for teaching Arabic in Colleges of Education in North-Central Nigeria. These include radio, television, slide projector, overhead projector, motion pictures, tape recorder, audio-video recorder device, digital video camera, multimedia personal computer (MPC), application software (Word processing, Spreadsheets, Power-point simulation and Speech recognition), multimedia projector; Liquid Crystal Display (LCD) to communicate large group, multimedia PC/laptop with video card and web camera or digital video camera, Computer database, Data processing mechanism, CD ROM and DVD, E-mail, G-mail, WhatsApp, Internet and World Wide Web (www). The remaining 9 items which were not available are Opaque projector, Teaching machines, Local Area Network (LAN), metropolitan area network (MLN), Wide Area Network (WAN), Hypermedia and Hypertext, Computer-mediated conferencing-video, Video text, Tele-text, Interactive Video Disc (IVD) interactive remote instruction (IRI) and Cell phone and idea of virtual classroom.

Research Question C: Are the Arabic education ICT tools adequately provided?

Table 2. Adequacy of ICT Tools for Teaching Arabic in Colleges of Education in   North-Central Nigerian

S/N	Items	Adequacy								
		A	%	V/A	%	N/A	%	Mean	SD	Inferences
1	Radio	3	46.	25	20.	15	33.	2.1333	.72286	Adequat

S/N	Items	A	%	V/A	%	N/A	%	Mean	SD	Inferences
		5	7		0		3			e
2	Television	43	57.3	20	16.0	12	26.7	2.1067	.64877	Adequate
3	Slide projector	27	36.0	24	32.0	24	32.0	2.0000	.80539	Adequate
4	Opaque projector	14	18.7	5	74.7	56	6.6	1.9333	.79412	Not Adequate
5	Overhead projector	20	26.6	14	54.6	41	18.6	2.1067	.78108	Not Adequate
6	Motion pictures	19	25.3	14	56.0	42	18.7	1.7733	.72733	Not Adequate
7	Tape recorder	38	50.7	23	18.7	14	30.7	2.1200	.69671	Adequate
8	Audio-video recorder device	34	45.3	21	26.7	20	28.0	2.0133	.74423	Adequate
9	Teaching machines	8	10.7	7	80.0	60	9.3	1.6533	.74423	Not Adequate
10	Digital video camera	22	29.3	38	22.7	17	48.0	1.7467	.80695	Adequate
11	Multimedia personal computer (PC) Application software such as:	31	41.3	36	10.7	8	48.0	2.3733	.67330	Very Adequate
12a	Word processing	26	34.7	39	13.3	10	52.0	2.3867	.71458	Very Adequate
S/N	Items	A	%	V/A	%	N/A	%	Mean	SD	Inferences
12b	Spreadsheets	39	52.0	29	9.3	7	38.7	2.2933	.63189	Very Adequate
12c	Power-point simulation	43	57.3	24	10.7	8	32.0	2.2133	.62154	Very Adequate
12d	Speech recognition	39	52.0	18	24.0	18	24.0	2.0000	.69749	Very Adequate
13	Multimedia projector; Liquid crystal display (LCD) to communicate to large group	28	37.3	23	32.0	24	30.7	1.9867	.79684	Adequate
14	Local area network (LAN)	19	25.3	6	66.7	50	8.0	1.9600	.74326	Not Adequate
15	Metropolitan area network (MLN)	18	24.0	8	65.3	49	10.7	1.8400	.75409	Not Adequate
16	Wide area network (WAN)	3	4.0	2	93.3	70	2.7	1.8933	.78108	Not Adequate

No	ICT Tool	Freq	%	Freq	%	Freq	%	Mean	SD	Remark
17	Multimedia PC/laptop with video card and web camera or digital video camera	6	8.0	12	53.3	40	16.0	1.8533	.67169	Not Adequate
18	Computer Database and data processing mechanism, CD ROM and DVD	51	68.0	23	1.3	1	30.7	2.2933	.48695	Very Adequate
19	E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW)	26	34.7	45	5.3	4	60.0	2.5467	.59940	Very Adequate
20	Hypermedia and Hypertext resources	15	20.0	6	72.0	54	8.0	1.9600	.81274	Not Adequate
21	Computer-mediated conferencing-video and audio conferencing	12	16.0	8	73.3	55	10.7	1.0000	.82199	Not Adequate
22	Video text, tele-text, interactive video disk (IVD), interactive remote instruction (IRI) and Cell phone	5	6.7	4	88.0	66	5.3	1.9200	.78431	Not Adequate
23	Idea of virtual classroom	5	6.7	2	90.6	68	2.7	1.7733	.70851	Not Adequate

Out of the twenty-three (23) ICT tools used in teaching Arabic Education, seven (7) items that were adequate include radio, television, slide projector, overhead projector, motion pictures, tape recorder, audio-video recorder device, digital video camera, Multimedia projector; Liquid Crystal Display (LCD) to communicate large group, multimedia PC/laptop with video card and web camera or digital video camera. The very adequate items for teaching Arabic are multimedia personal computer (MPC), application software (word processing, Spreadsheets, Power-point simulation and Speech recognition), Computer database, Data processing mechanism, CD ROM and DVD, E-mail, G-mail, WhatsApp, Internet and World Wide Web (WWW), while (12) items that were not adequate are opaque projector, overhead projector, motion pictures, teaching machines, local area network (LAN), metropolitan area network (MLN), wide area network (WAN), multimedia PC/laptop with video card and web camera or digital video camera, hypermedia and hypertext resources, computer-mediated conferencing-video and audio conferencing video text, tele-text, Interactive Video Disk (IVD) and Interactive Remote Instruction (IRI) and Cell-phone and idea of virtual classroom.

Summary of the Major Findings

The major findings of this study are summarized below.

a. Seventy-five (75) (84% male and 16%female) lecturers of Arabic responded to the questionnaire, which were distributed among 75 (27 Federal, 39 State and 9 Private) lecturers from 15 colleges of education across the North-Central Nigeria with consideration to their qualifications.

b. Out of twenty-three (23) ICT tools, which were assessed to ascertain their availability level for teaching Arabic in colleges of education in North-Central Nigeria, 14 (60.9%) were available, while 9 (39.1%) were not available.

c. The findings on the affordability level of the ICT tools used for teaching Arabic depicted that 8 (34.8%) were affordable, 13(56.5%) were very affordable, while 2 (8.7%) were not affordable.

d. It was also found that 7 (30.4%) were adequate, 4 (17.4%) were very adequate, while 12(52.2%) were not adequate.

Discussion of the findings

The first finding revealed that the available ICT tools for teaching Arabic were more than those which were not available. Among the audio and audio-visual hardware and software, only two items, that is, opaque projector and teaching machine were not available. The reason for non-availability of both is attributed to their status as old tools, which some modern applications such as computer systems have replaced in instructional delivery. On the part of the multimedia hardware and software, seven tools which were not available including LAN, MLN, WAN, hypermedia and hypertext resources, computer-mediated conferencing-video and Audio conferencing, video text, tele-text, IVD and IRI, and Idea of visual classroom. They are said to be highly expensive to use and maintain.

Some of the ICT tools that were said to be affordable were not available because the authority did not procure them. Conversely, the very affordable ones were those that were procured and distributed by the authority for instructional delivery. Out of all, only two were considered as not affordable among the 23 ICT tools assessed.

The finding showed that the adequacy level of the available ICT tools for teaching Arabic is below the average level. This study, therefore, corroborates the study of Aja and Eze (2016) which reported that the ICT devices for instructional delivery in Ebonyi State were not adequately available. This is an indication of inadequate availability of the ICT tools for teaching at both secondary and tertiary levels of education.

CONCLUSION

ICT tools available for teaching Arabic in colleges of education in Central Nigeria are mostly audio and audio-visual tools, while modern tools are not available. Although some ICT tools are not available, tools such as teaching machines are considered unaffordable. In general, ICT tools for teaching Arabic are not adequately available. It is therefore recommended that the government provide financial support for the procurement of expensive ICT tools to improve the Arabic language learning process. In addition, appropriate experts should be recruited to support the use of the required ICT tools, and existing staff should be periodically retrained to be able to operate the tools. Schools are also advised to carry out routine maintenance and repairs on damaged tools periodically.

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