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### Investigating Tertiary Education Students' Self-Efficacy and Willingness towards Using Online Collaborative Tools for Learning in Kogi State Tertiary Institutions

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**Abstract:** Online Collaborative tools are computer software designed to help people involved in a common task achieve their goals. Descriptive survey design was used for the study. The study is aimed at Investigating Tertiary Education Students Self-Efficacy and Willingness towards using Online Collaborative Tools for Learning in Kogi State Tertiary Institutions The population of this study comprises all tertiary students of the five (5) selected tertiary institutions in Kogi State. The target population for this study was tertiary education students of the Faculty of Education, Sciences and Arts in selected Federal and State Tertiary institutions in Kogi state. A sample size of four hundred and eighty (480) respondents were sampled using Researchers' Advisors Model (2006). The findings revealed that there is no significant difference in the opinions of respondents (students) on the available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions. This is because the computed probability is 0.701 which is higher that the p-value of 0.05 level of significance. In conclusion, it was suggested that, among other things that there should be available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions. The study further recommended that tertiary education students should be trained to use online collaborative tools for learning purposes in Kogi State Tertiary Institutions.

Keywords: collaborative tools, ICT, learning, self-efficacy and willingness

### **INTRODUCTION**

The role of education for humanity is immeasurable, especially in the age of breakthroughs in science and technology. The National Policy on Education (FRN, 2014) underscores the crucial role of education as a catalyst for societal transformation, with a primary focus on meeting the individual needs of citizens. Education is not only a fundamental right but also a central component

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of human development, serving as a prerequisite for achieving broader social, cultural, and economic objectives (NPE, 2004). Tolorunleke, Haruna & Olugbade, (2023) described education as the total development of individual child, through acceptable methods and techniques, according to abilities and interest, as well as the needs of the society to take rightful place and the child meaningful contribution towards the development and advancement of his society. Students need Information and Communication Technology (ICT) skills to use ICT tools in education confidently, satisfactorily, and persistently (Landrum, 2020).

The rapid and continuous growth of the use of ICT and digital technology in education, and in particular effectively using ICT requires students to have the necessary skills and competencies to perform tasks and solve problems using ICT (Fu, 2013; Martin & Grudziecki, 2006; Sarkar, 2012).ICT skills are a subset of digital literacy skills (Reddy et al., 2020).According to Fu (2013), digital literacy is a set of skills students require to use digital tools, educational applications, and digitally sourced information to support achieving goals in school and life situations. Self-efficacy has a great effect on students use of ICT. Self-efficacy is a factor from within the individual that affects social laziness behavior. Individuals who have high self-efficacy will show better contribution in the group compared to individuals who have low self-efficacy (Ramadhani, 2021). This is in line with Bandura's theory that someone who has high self-efficacy will believe in his abilities so that he will not reduce all the efforts he makes. So in this case individuals with high self-efficacy will try to contribute to groupwork. In addition, the non-identification of individual contributions in the group can affect the individual's social laziness (Bandura, 1997). Competencies affects every facet of human endeavour by determining the beliefs a person holds regarding the ability to affect situations which invariably influence both the power a person actively has to face challenges.

Collaborative tools are computer software designed to help people involved in a common task achieve their goals. It is usually associated with individuals not physically co- located, but instead working together across an Internet connection. It can also include remote access storage systems for archiving data files that can be accessed, modified and retrieved by the distributed work group members (Heritage 2011). Collaborative tools are computer software designed to help people involved in a common task achieve their goals. Online collaborative tools are web-based applications that offer basic services such as instant messaging for groups, mechanism, for file sharing, and collaborative search engines (CSE) to find information distributed within the system of the organization, community or team. Additionally, the functionality is sometimes further expanded by providing integrated online calendars, shared online whiteboards, to organize task and ideas, or internet teleconferencing integrations.

The 21st century ideas about knowledge and learning demand shifts from the traditional method of teaching to collaborative approach (Bandhana, 2012). Online collaborative tools are not the only effective learning collaborative tools. The application of online collaborative tools for learning,

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particularly in Nigerian universities is still at its infancy. Majority of Nigerian undergraduate students are neither familiar, nor skillful in employing these tools in the process of learning. It is of high importance that the conventional learning method should be supplemented with online collaborative tools like WhatsApp, Telegram, Blog, Twitter, Skype, YouTube, Google Docs, LinkedIn, Facebook, Flickr which can stimulate and arouse students' interest to learn effectively. Hence, to achieve effective learning among tertiary education students in Kogi State, there should be shift from traditional educational environment to technological advancement that has remain a hope of many decades to come. The study therefore Investigated Tertiary Education Students Self-Efficacy and Willingness Towards using Online Collaborative Tools for Learning in Kogi State Tertiary Institutions.

### LITERATURE/THEORETICAL UNDERPINNING

As the importance of ICT literacy continues to prominence, there is a pressing need to evaluate students' proficiency in mastering these critical competencies. Such knowledge is essential from multiple perspectives, including informing educational policy, enhancing teachers 'instructional practices, and designing programs to prepare the next generation for the dynamic working life of tomorrow. To accomplish this task effectively, reliable, authentic, and valid measurement instruments are imperative, enabling the comprehensive monitoring of student's progress in mastering these complex and multi-faceted competencies (Ackermans, Bakker, Gorissen, Van Loon, A.-M., Kral, & Camp, 2023)

The ICT world has initiated a transition of emphasis from analogous educational research based technological development to that of digital knowledge based technological development in education (Jude & Dankoro, 2012). Therefore, in order to produce competent teachers for human capacity building, information and communication technology (ICT) must be given prior focus in student education system. The advancement which ICT resources offer higher education can be evident through accessibility to quality resource material and utilization in instructional delivery, particularly when learners are competent in the use of these resource materials because productive instructional delivery enhances learners' creativity and intellectual development. Information and communication technology (ICT) have become an integral part of daily lives for the last decades (Yusuf & Afolabi, 2010).

Computer has being a useful tool for research purposes. The experience of introducing ICTs in educational settings all over the world and over the past decades shows that the educational benefits of ICTs cannot be underestimated (Yusuf, 2005). The federal government of Nigeria recognizes that ICT is a strategic imperative for national development. According to Adeyanju (2016), the use of ICT makes lessons more interesting, more enjoyable for students, more diverse, more motivating and supportive of productive learning and research. ICT is a tool that tertiary students can use to facilitate and enhance their learning purposes. Although, there are no clear

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synergies on defining ICT proficiencies for students, they need training not only in computer literacy but also in the application of various kinds of educational software for learning.

Heritage (2011) defines collaborative as an adjective which means working together towards a common end. Collaborative tools are computer software designed to help people involved in a common task achieve their goals. It is usually associated with individuals not physically colocated, but instead working together across an Internet connection. It can also include remote access storage systems for archiving data files that can be accessed, modified and retrieved by the distributed work group members. Online collaborative tools are web-based applications that offer basic services such as instant messaging for groups, mechanism, for file sharing, and collaborative search engines (CSE) to find information distributed within the system of the organization, community or team. Additionally, the functionality is sometimes further expanded by providing integrated online calenders, shared online whiteboards, to organize task and ideas, or internet teleconferencing integrations.

In recent global development, collaboration has become an essential skill necessary for effective functioning in society. The emergence of Web 2.0 has been heralded as a tool for facilitating collaboration. Examples of Web 2.0 technologies include Twitter, Facebook, MySpace, Wikis, Google Docs, and Blogs, which allow the exchange of thoughts via the Web without restrictions of time or place. One of the most popular Web 2.0 technologies is Wiki, which has shown much promise in promoting communication, collaborative authoring, and information sharing (Parker, 2009; Trentin, 2009).

### **Objectives of the Study**

The purpose of this study Investigated Tertiary Education Students Self-Efficacy and Willingness towards using Online Collaborative Tools for Learning in Kogi State Tertiary Institutions. Specifically, this study:

- 1. examined the available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions, Nigeria;
- 2. determined how well can tertiary education students use online collaborative tools for learning purposes in Kogi State Tertiary Institutions; and
- 3. find out the level of tertiary education students willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution, Nigeria.

### **Research Questions**

The following research questions were raised in this study

- 1. What are the available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions?
- 2. How well can tertiary education students use online collaborative tools for learning purposes?

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3. What is the level of tertiary education students willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution?

### **Research Hypothesis**

The following null hypothesis was formulated and was tested at 0.05 level of significance

- **H**<sub>01</sub>: There is no significant difference in the opinion of the respondents on the available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions, Nigeria;
- **Ho2:** There is no significant difference in the opinion of the respondents on how well can tertiary education students use online collaborative tools for learning purposes in Kogi State Tertiary Institutions; and
- **Ho3:** There is no significant difference in the opinion of the respondents on the level of tertiary education students willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution, Nigeria.

### METHODOLOGY

Descriptive survey design was used for the study. The study is aimed at Investigating Tertiary Education Students Self-Efficacy and Willingness towards using Online Collaborative Tools for Learning in Kogi State Tertiary Institutions The population of this study comprises all tertiary students of the five (5) selected tertiary institutions in Kogi State. The target population for this study was tertiary education students of the Faculty of Education, Sciences and Arts in selected Federal and State Tertiary institutions in Kogi state. A sample size of four hundred and eighty (480) respondents were sampled using Researchers' Advisors Model (2006). Simple Random technique was used to determine the sample size. Stage one, purposive sampling technique was used to select five (5) tertiary institutions, two universities, one from each of Federal and state Universities, Polytechnics and Colleges of Education while in stage two, simple random sampling technique by balloting with replacement was used to select (96) respondents each from the sampled institutions, totaling (480) respondents. The instrument used for the study contained three phases on the availability, self-efficacy and willingness of tertiary students in utilizing online collaborative tools for learning in Kogi State tertiary institutions. The questionnaire was designed using the 4-point modified Likert rating scale and respondents were required to respond to items by ticking as applicable. The data obtained from the researcher-designed questionnaire was subjected to inferential and descriptive statistics. Percentage and frequency count were used to answer the research questions. The inferential statistics adopted was chi-square  $(x^2)$  to test the differences and bring out the causes of such differences to further check the significant differences with the degree of freedom at 0.05 level of significance using Statistical Package for Social Sciences (SPSS) version 23.0 for windows.

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#### **RESULTS/FINDIMGS**

Research Question 1: What are the available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions?

S/No	Which of online collaborative tools for	Yes No			0
	learning is available for use in your				
	institution?	Freq	%	Freq	%
1	Facebook	421	87.7	59	12.3
2	Google Plus (Google +)	309	64.4	181	37.7
3	Twitter	472	98.3	8	1.7
4	Flicker	326	67.9	154	32.1
5	YouTube	309	64.4	171	35.6
6	LinkedIn	296	61.7	184	38.3
7	Slideshare	287	59.8	193	40.2
8	WhatsApp	468	97.5	12	2.5

 Table 1: Opinions of the Respondents on availability online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions

In response to items 1 to 8 in table 1, which sought the opinions of Respondents on whether there are the available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions, responses of all respondents were collected, analyzed and discussed. Going by the respondents' opinions on items 1 to 8 as shown in Table 1. In responses to item 1, whether there are availability of Facebook in the universities, the results shows that, 421 (87.7%) agreed while, 59 (12.3%) of the respondents disagreed to the statement. In responses to item 2 on whether there are Google Plus (Google +), the results shows that, 309 (64.4%) agreed while, 181 (37.7%) of the respondents disagreed to the statement. Also, in responses to item 4 on whether there are Flicker the results shows that, 326 (67.9%) agreed while, 154 (32.1%) of the respondents disagreed to the statement. In responses to item 8 on whether there is availability of WhatsApp in the universities, the results shows that, 468 (97.5%) agreed while, 12 (2.5%) of the respondents disagreed to the statement. Generally, this shows that there are available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions. The result shows they are affirmative.

**Research Question Two:** *How well can tertiary education students use online collaborative tools for learning purposes?* 

### Table 2: Opinions of the Respondents on how well can tertiary education students use online collaborative tools for learning purposes

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S/N	Item Statement	SA	%	Α	%	D	%	SD	%
9.	I can use specific search strategies to locate information with online collaborative tools	407	84. 8	33	6.9	10	2.1	30	6.25
10.	I can use a computer desktop/laptop to access online collaborative tools	309	64. 4	62	12. 9	99	20.6	10	2.08
11.	I feel confident enough in using online collaborative tools for learning	290	60. 4	104	21. 7	66	13.8	20	4.2
12.	I believe I can use online collaborative tools for research purposes	270	56. 3	80	16. 7	109	22.7	21	4.4
13.	I can explain and use online collaborative tools effectively	310	64. 6	89	18. 5	71	14.8	10	2.08
14	I feel confident when using video sharing sites(YouTube)	285	59. 4	82	17. 1	83	17.3	30	6.25
15	I am certain when using micro blogs (twitter, Plurk).	307	63. 9	84	17. 5	69	14.4	10	2.08
16	I can register and log into all the available online collaborative tools	208	43. 3	106	22. 1	66	13.8	100	20.8
17	I can use specific search strategies to locate information with online collaborative tools	284	59. 2	94	19. 6	62	12.9	40	8.3
18	I can search for academic materials using online collaborative tools	300	62. 5	71	14. 8	79	16.4	30	6.25
19	I can communicate easily on online collaborative tools	298	62. 1	93	19. 4	50	10.4	37	7.7

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In response to items 9 to 19 in table 2, which sought the opinions of Respondents on how well can tertiary education students use online collaborative tools for learning purposes in Kogi State Tertiary Institutions, responses of all respondents were collected, analyzed and discussed. Going by the respondents' opinions on items 9 to 19 as shown in Table 2. In responses to item 9, whether they can use specific search strategies to locate information with online collaborative tools, the results shows that, 407 (84.4%) strongly agreed, 33 (6.9%) agreed, 10 (2.1%) disagreed, while, 30 (6.25%) of the respondents strongly disagreed to the statement. In responses to item 10 on whether they can use a computer desktop/laptop to access online collaborative tools, the results shows that,

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309 (64.4%) strongly agreed, 62 (12.9%) agreed, 99 (20.6%) disagreed, while, 10 (2.08%) of the respondents strongly disagreed to the statement. Also, in responses to item 12 on whether they believe they can use online collaborative tools for research purposes the results shows that, 270 (56.3%) strongly agreed, 80 (16.7%) agreed, 109 (22.7%) disagreed, while, 21 (4.4%) of the respondents strongly disagreed to the statement. In responses to item 15 on whether they are certain when using micro blogs (twitter, Plurk), the results shows that, 307 (63.9%) strongly agreed, 84 (17.5%) agreed, 69 (14.4%) disagreed, while, 10 (2.08%) of the respondents strongly disagreed to the statement. In responses to item 18 on whether they are certain when search for academic materials using online collaborative tools the results shows that, 300 (62.5%) strongly agreed, 71 (14.8%) agreed, 79 (16.4%) disagreed, while, 30 (16.25%) of the respondents strongly disagreed to the statement. In responses to item 19 on whether they are certain when search for academic materials using online collaborative tools the results shows that, 298 (62.1%) strongly agreed, 93 (19.4%) agreed, 50 (10.4%) disagreed, while, 37 (7.7%) of the respondents strongly disagreed to the statement. Generally, this shows that majority of the Respondents agreed that, majority of the students use online collaborative tools for learning purposes in Kogi State Tertiary Institutions. The result shows they are affirmative.

# **Research Question Three:** What is the level of tertiary education students willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution?

	Institution								
S/N	Item Statement	SA	%	Α	%	D	%	SD	%
•									
19.	I can use specific search	107	22.	33	6.9	140	29.2	200	41.7
	strategies to locate information		3						
	with online collaborative tools								
20	I am always ready to use online	109	22	62	12	99	20.6	210	43.8
20.	collaborative tools	107	 7	02	9	,,,	20.0	210	1010
21	It will take me time hefere I con	100	20	66	12	104	017	120	25.0
21.	It will take me time before I can	190	39.	00	15.	104	21.7	120	25.0
	use online collaborative tools for		6		8				
	learning								
22.	I am still planning on using	70	14.	80	16.	109	22.7	221	46.0
	online collaborative tools for		6		7				
	diagovery on a regular basis to		0		,				
	discovery on a regular basis to								
	develop my learning skills.								

## Table 3: Opinions of the Respondents on level of tertiary education students willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution

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23.	I would still do all my best to integrate online collaborative tools for instruction.	110	22. 9	89	18. 5	71	14.8	210	43.8
24	I would still do all my best to integrate online collaborative tools for researches.	185	38. 5	82	17. 1	83	17.3	130	27.1
25	I will advocate for the use of online collaborative tools in education due to their convenience	107	22. 3	84	17. 5	69	14.4	210	43.8
26	I will advocate for the use of online collaborative tools in education due to their relevance	208	43. 3	16	3.3	56	11.7	200	41.7
27	I enjoy the use of online collaborative tools for learning purposes.	104	22. 3	44	9.2	62	12.9	270	56.3
28	Online collaboration can improve my learning	100	20. 8	71	14. 9	49	10.2	260	54,2
29	I am willing to use any online tools that is accessible	108	22. 5	43	8.9	60	12.5	267	55.6
30	Financial constraints deprive me from getting data to access online tools	114	30. 0	94	19. 6	62	12.9	210	43.8
31	I use software such as chat discussion forums online	84	17. 5	84	17. 5	72	15.0	240	50.0
32	I will advocate for the e-tutoring to support tools for collaborative learning	84	17. 5	94	19. 6	42	8.6	260	54.2
33	I am ready to use virtual learning as an online collaborative tools	109	22. 7	20	4.2	89	18.5	262	54.6
34	Inadequate knowledge of browsing skills makes it difficult for me to enjoy collaborative online learning	160	33. 3	80	16. 7	19	3.9	221	46.1

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In response to items 19 to 34 in table 3, which sought the opinions of Respondents on level of tertiary education students willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution, responses of all respondents were collected, analyzed and discussed. Going by the respondents' opinions on items 91 to 34 as shown in Table 3. In responses to item 19, whether they can use specific search strategies to locate information with online

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collaborative tools, the results shows that, 107 (22.3%) strongly agreed, 33 (6.9%) agreed, 140 (23.9%) disagreed, while, 200 (41.7%) of the respondents strongly disagreed to the statement. In responses to item 22 on whether they are still planning on using online collaborative tools for discovery on a regular basis to develop my learning skills, the results shows that, 70 (14.6%) strongly agreed, 80 (16.7%) agreed, 109 (22.7%) disagreed, while, 221 (46.0%) of the respondents strongly disagreed to the statement. Also, in responses to item 25 on whether they advocate for the use of online collaborative tools in education due to their convenience the results shows that, 107 (22.7%) strongly agreed, 84 (17.5%) agreed, 69 (14.4%) disagreed, while, 210 (43.8%) of the respondents strongly disagreed to the statement. In responses to item 27 on whether they enjoy the use of online collaborative tools for learning purposes, the results shows that, 104 (22.3%) strongly agreed, 44 (9.2%) agreed, 62 (12.9%) disagreed, while, 270 (56.3%) of the respondents strongly disagreed to the statement. In responses to item 30 on whether Financial constraints deprive them from getting data to access online tools the results shows that, 114 (30.0%) strongly agreed, 94 (19.6%) agreed, 62 (12.9%) disagreed, while, 210 (43.6%) of the respondents strongly disagreed to the statement. In responses to item 32 on whether they are will advocate for the e-tutoring to support tools for collaborative learning, the results shows that, 84 (17.5%) strongly agreed, 94 (19.6%) agreed, 42 (8.6%) disagreed, while, 260 (54.2%) of the respondents strongly disagreed to the statement. Generally, this shows that majority of the Respondents disagreed towards level of tertiary education students' willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution, The result shows they are negativity.

### **Hypotheses Testing**

This section deals with hypotheses testing in relation to the variables identified in the research objectives. Three hypotheses were designed for this study and analysed with Chi-square  $(x^2)$  because the respondents was one subject. Thirty four (34) questions in the questionnaire were designed for the three hypotheses used for this study.

### Hypothesis 1: There is no significant difference on available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions

The test instrument administered to the respondents was used to obtain data for the study while Chi-square  $(x^2)$  was used in testing the hypothesis. The Summary of data collected and analyzed in respect to hypothesis one is presented in Table 4.

Table 4: Summary of Chi-Square (X <sup>2</sup> ) on the available online collaborative tools for learning
among tertiary education student in Kogi State Tertiary Institutions

 0			0	e e e e e e e e e e e e e e e e e e e	
 Ν	X <sup>2</sup> cal	Df	α	p-value	Decision
417	096.1654	417	0.05	0.701	Retained

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As revealed on table 4, it was evident that, p-value  $0.701 > \alpha = 0.05$  level of significance. This means the p-value calculated at 0.701 is greater than  $\alpha = 0.05$ . The null-hypothesis (H0<sub>1</sub>) is thus, retained. Therefore, there is no significant difference in the opinions of the respondents on available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions.

### Hypothesis 2: There is no significant difference between the main ratings of the respondents on how well can tertiary education students use online collaborative tools for learning purposes.

The test instrument administered to the respondents was used to obtain data for the study while Chi-square  $(x^2)$  was used in testing the hypothesis. The Summary of data collected and analyzed in respect to hypothesis one is presented in Table 5.

Table 5: Summary of Chi-Square (X <sup>2</sup> ) on the how well can tertiary	education students use
online collaborative tools for learning purposes	

Ν	X <sup>2</sup> cal	Df	A	p-value	Decision
417	53.739	417	0.05	0.092	Retained

As revealed on table 5, it was evident that, p-value  $0.092 > \alpha = 0.05$  le1vel of significance. This means that the p-value calculated at 0.092 is greater than  $\alpha = 0.05$ . The null-hypothesis (H0<sub>2</sub>) is thus, retained. Therefore, there is no significant difference in the opinions of respondents on how well can tertiary education students use online collaborative tools for learning purposes.

### Hypothesis 3: There is no significant difference between the main ratings of the respondents on level of tertiary education students willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution.

The test instrument administered to the respondents was used to obtain data for the study while Chi-square  $(x^2)$  was used in testing the hypothesis. The Summary of data collected and analyzed in respect to hypothesis one is presented in Table 6.

Table 6: Summary of Chi-Square (X<sup>2</sup>) on the significant difference between the main ratings<br/>of the respondents on the level of tertiary education students' willingness in the<br/>utilization of online collaborative tools for learning in Kogi State Tertiary<br/>Institution

Ν	X <sup>2</sup> cal	Df	А	p-value	Decision
417	26.293	417	0.05	0.01	Rejected

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As revealed on table 6, it was evident that, p-value  $0.076 > \alpha = 0.05$  le1vel of significance. This means that the p-value calculated at 0.01 is less than  $\alpha = 0.05$ . The null-hypothesis (H0<sub>3</sub>) is thus, rejected. Therefore, there is a significant difference in the opinions of the respondents on level of tertiary education students' willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution.

### **DISCUSSION OF THE FINDING**

Question one analysis and findings show that participants agreed with the view of students on the on the Investigating Tertiary Education Students' Self Efficacy and Willingness Towards Using Online Collaborative Tools for Learning in Kogi State Tertiary Institutions, responses of all respondents were collected, analyzed and discussed. The findings in Table 1 show that the response to items 1 to 8 which sought the opinions of Respondents on whether there are the available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions, responses of all respondents were collected, analyzed and discussed. Going by the respondents' opinions on whether there are availability of Facebook in the universities, the results shows that majority of the respondents agree to the statement. It was also discover that there are availability of WhatsApp in the universities. Generally, this shows that there are available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions. The result shows they are affirmative. These findings conformed with the view of Ramadhani (2021) that Self-efficacy has a great effect on students use of ICT. Self-efficacy is a factor from within the individual that affects social laziness behavior. Individuals who have high self-efficacy will show better contribution in the group compared to individuals who have low self-efficacy.

The findings in Table 2 show that the response to items 9 to 19 which sought the opinions of opinions of Respondents on how well can tertiary education students use online collaborative tools for learning purposes in Kogi State Tertiary Institutions, responses of all respondents were collected, analyzed and discussed. Majority of the participants agreed that training on classroom management attended by secondary school teachers has helped their classroom lessons to run smoothly despite disruptive behavior by students. It was also agreed by participants that classroom management training attended by university lecturers has helped them to establish and maintain conditions that will enable learners to achieve instructional objectives efficiently. The majority of the result analysis shows that, classroom management training attended by secondary school teachers are able to determine the level of students' participants also agreed that teachers are able to determine the level of students' participation in lesson due to classroom management training attended by teachers. This was supported by Adeyemo (2012) who describe the process of ensuring that classroom lessons run smoothly despite disruptive behaviour by students. Managing the classroom environment is a responsibility for every teacher. The way a teacher manages his classroom will dictate the stress

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he or she may pass through, his or her pupils'/students' achievement, behaviour and the tone of the school.

The findings in Table 3 show that the response to items 19 to 34 which sought the opinions of Respondents on level of tertiary education students willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution, responses of all respondents were collected, analyzed and discussed. Going by the respondents' opinions majority disagree that they are not using specific search strategies to locate information with online collaborative tools. Also on whether they are still planning on using online collaborative tools for discovery on a regular basis to develop my learning skills, the majority of the respondents disagreed to the statement. In responses to item 27 on whether they enjoy the use of online collaborative tools for learning purposes, the results shows that, 104 (22.3%) strongly agreed, 44 (9.2%) agreed, 62 (12.9%) disagreed, while, 270 (56.3%) of the respondents strongly disagreed to the statement. In responses to item 30 on whether financial constraints deprive them from getting data to access online tools. Also on whether they are will advocate for the e-tutoring to support tools for collaborative learning, the results shows that, the majority of the respondents strongly disagreed to the statement. Generally, this shows that majority of the Respondents disagreed towards level of tertiary education students willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution, The result shows they are negativity. This was supported by Heritage (2011) who opines that collaborative as an adjective is a means of working together towards a common end. Collaborative tools are computer software designed to help people involved in a common task achieve their goals. It is usually associated with individuals not physically co-located, but instead working together across an Internet connection.

### CONCLUSIONS

This study investigated tertiary students self-efficacy and willingness towards using online collaborative tools for learning in Kogi state tertiary institution. The result obtained from the data gathered and analyzed in this study indicated that tertiary education students used online collaborative tools for learning purposes in Kogi State Tertiary Institutions. Also, there are adequate and effective level of tertiary education students' willingness in the utilization of online collaborative tools for learning in Kogi State Tertiary Institution.

### Recommendations

Based on the finding of the study, the following recommendation is hereby put forward that:

1. It will be better to study more comprehensive and add some more domains related to available online collaborative tools for learning among tertiary education student in Kogi State Tertiary Institutions;

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- 2. Tertiary education students should be re-trained to use online collaborative tools for learning purposes in Kogi State Tertiary Institutions; and
- 3. There is need for more willingness in the utilization of online collaborative tools for learning among Tertiary students in Kogi State Tertiary Institution.

### REFERENCES

- Abimbola, I. O., & Omosewo, E. O. (2006). History of science for degree students. Ilorin: Olayiwola Publishers.
- Abubakar, B. M. (2010). Availability and use of information and communication technology (ICT) in six Nigerian university library school. Library Philosophy and Practice. Retrieved from http://unllib.unl.ed/lpp/bappah-abubakar.pdf
- Adedeji, O. A. (2010). The development of modern information and communications technology in Ibadan. Ibadan: Creative Educational publication Ltd.

Ackermans, K., Bakker, M., Gorissen, P., van Loon, A.-M., Kral, M., & Camp, G. (2023).

Development and validation of a test for measuring primary school students' effective use of ICT: The ECC-ICT test. Journal of Computer Assisted Learning, 1–13. https://doi.org/10.1111/jcal.12924

Aesaert, K., Voogt, J., Kuiper, E., & van Braak, J. (2017). Accuracy and biasof ICT self efficacy: An empirical study into students' over- and under-estimation of their ICT competencies.

Computers in Human Behavior, 75, 92-102. https://doi.org/10.1016/j.chb.2017.05.010

- Asogwa, U. D. (2007). Educational reforms and attainment of MDGs; the Nigeria experience. In *ICT competence of pre service Teachers*. Nworgu, B.G.
- Azevedo, R., Mudrick, N. V., Taub, M., & Bradbury, A. E. (2019). Self-regulation in computerassisted learning systems. In J. Dunlosky &K. A. Rawson (Eds.), The Cambridge handbook of cognition and education(1st ed., pp. 587–618). Cambridge University Press. http://doi.org/10.1017/9781108235631.024
- Bandhana, V. J. (2012). 21st century skills and competences for new millennium learners in OECD countries. Organization for Economic Cooperation and Development E DU working Paper no. 41. Retrieved from http://www.olis.oecd.org/olis/2009doc.nsf/linkt o/edu-wkp(2009)20
- Compeau, D. R. & Higgins, C.A. (1995). Computer self-efficacy: Development of a measure and initial test. MIS Quarterly, 19(2), 212-391.
- Chu, S., Kennedy, D., & Mak, M. (2009). MediaWiki and Google Docs as online collaborative project co- construction. Proceedings of the 2009 International Management [CDROM]. Hong Kong, Dec 3-4, 2009
- Creswell, J. W. (2014). Educational Research: *Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River: Pearson.

Vol.12, Issue 12,21-37, 2024

Online ISSN: 2054-636X (Online)

Print ISSN: 2054-6351(Print)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

- Creswell, J. W., & Plano Clark, V. L. (2007). Designing and conducting mixed methods research. Thousand Oaks, CA: Sage Publications. Creswell, J. W., & Plano Clark, V. L. (2007). Designing and conducting mixed methods research. Thousand Oaks, CA: Sage Publications.
- Enochson, T. N. (2008). How family support and Internet self-efficacy influence the effects of elearning among higher aged adults: Analyses of gender and age differences. Computers & Education, (1), 255-264 http://dx.doi.org/10.1016/j.compedu.2010.01.011
- Federal Republic of Nigeria. (FRN) (2013). National Policy on Education (6th ed). Yaba, Lagos: NERDC Press.
- Fu, J. S. (2013). ICT in education: A critical literature review and its implica-tions. International Journal of Education and Development using Informa-tion and Communication Technology, 9, 112–125.
- Jude, W. I., & Dankoro, J. T. (2012). ICT Resources Utilization, Availability and Accessibility by Teacher Educators for Instructional Development in college of Education, Kastina-Ala. New media and mars Communication. ISSN 224-3267 (paper) ISSN 2224-3275 (online), pp.1-6. Retrieved from www.uste.org
- Heritage, A. (2011). Dictionary of English Language. Houghton Mufflin Publishing Company.
- Kolawole R.O. & Aderogba A.J. (2019). Postgraduate Students Mode of and their Utilization of Mobile Technologies for Learning in South-West Nigeria. Conference
- Proceedings of the AITIE 3rd International Conference and Workshop on Innovation, Technology and Education
- Krokfors, K., & Myllari, J. (2010). Why Minimal guidance during instruction does not work: an analysis of the failure of constructivist, discovery, problem-based, teaching-Educational Psychologist, 41(2), 75-86.
- Landrum, B. (2020). Examining Students' confidence to learn online, self-regulation skills and perceptions of satisfaction and usefulness of onlineclasses. Online Learning, 24(3), 128–146. http://doi.org/10.24059/olj.v24i3.2066
- Martin, A., & Grudziecki, J. (2006). DigEuLit: Concepts and tools for digital literacy development. Innovation Sciences, 5(4), 249–267.
   Martin, A., & Grudziecki, J. (2006). DigEuLit: Concepts and tools for digital literacy in Teaching and Learning in Informa-tion and Computer https://doi.org/10.11120/ital.2006.05040249
- Matusov, E., & Brobst, J. (2013). Radical experiment in dialogic pedagogy in higher education and its centaur failure: Chronotopic analysis. Hauppauge, NY: Nova Science Publishers. "The Past and Future of IR Scholarship". Diplomatic Courier. 2016-02-08.
- Marquenie, E., Opsteen, J., Ten Brummelhuis, A., & van der Waals, J.(2014). Elk talent een kans (p. 36). VO-raad. https://leerling2020.nl/wp-content/uploads/2017/08/Onderzoeksnotitiegepersonaliseerd-leren.pdf

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Online ISSN: 2054-636X (Online)

Print ISSN: 2054-6351(Print)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

- Moje, E. (2015). Doing and teaching disciplinary literacy with adolescentlearners: A social and cultural Enterprise. Harvard Educational Review, 85 254-278. http://doi.org/10.17763/0017-8055.85.2.254
- Nwagbo, C. R. (2008). Practical approach to effective teaching of local and major biotic communities (Blomes) to secondary school students for sustainable development. Science teachers' association of Nigeria (STAN) Biology panel series pg 41-55.
- Ogunleye, A.O. (2011). Girls' perception of strategies for improving low enrolment, under achievement and attitudes of girls in Physics at the Senior Secondary School Level. Journal of science Teachers Association of Nigeria, 36 (122), 61-71.
- Onasanya, S. A. (2009). Information and communication technology (ICT) in education. In I.O. Abimbola & A.O. Abolade (Eds).Fundamental principles & practice of instruction. Ilorin: Department of Science Education, University of Ilorin. 228-244.
- Onasanya, S.A. Sheu, R.A, Ogunlade, O.O. & Adefuye J. O, (2011). Teacher's awareness and extent of utilization of information communication technologies for effective science and Health Education in Nigeria Singapore Journal of Scientific Research, 1, 49-58.
- Obianke, J. & Oyedeji, O.S. (2010). An Investigation into teachers professional qualification and students performance in chemistry in senior Secondary School Level. (Unpublished master's Dissertation) Ahmadu Bello Zaria, Nigeria.
- Parker, Norwegian Ministry of Education and Research. (2009). White paper on teacher education" The teacher – the role and the education". Report to the Storting .11 (2008-2009). Retrieved November 05, 2010, from http://www.regjeringen.no/upload/KD/Vedlegg/stortingsmeldinger/TeacherEducationFac tSheet.pdf.
- Prior, D. D., Mazanov, J., Meacheam, D., Heaslip, G., & Hanson, J. (2016). Attitude, digital literacy and self efficacy: Flow-on effects for online learning behavior. The
- Internet and Higher Education, 29, 91– 97.https://doi.org/10.1016/j.iheduc.2016.01.001
- Prompt, T. J. (1996). Teaching and Learning for the Future. Report of the Committee on Multimedia Training (COMMITT). Den Haag: SDU.
- Ramadhani, T. R. (2021). The relationship between self-efficacy and social loafing in group assignments in 2019 batch students. (Unpublished thesis). Faculty of Psychology. University of Surabaya
- Reddy, P., Sharma, B., & Chaudhary, K. (2020). Digital literacy: A review of literature. I international Journal of Technoethics, 11(2), 65–94. https://doi.org/10.4018/IJT.20200701.oa1
- Rubach, C., & Lazarides, R. (2021). Addressing 21st-century digital skills inschools— Development and validation of an instrument to measure teachers' basic ICT competence beliefs. Computers in Human Behavior,118, 106636. https://doi.org/10.1016/j.chb.2020.106636
- Sarkar, S. (2012). The role of information and communication technology(ICT) in higher education for the 21st century. The Science Probe, 1(1),30–40.

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

- Supena, I., Darmuki, A., & Hariyadi, A. (2021). The influence of 4C (constructive, critical, creativity, collaborative) learning model on Students' learning outcomes. International Journal of Instruction, 14(3), 873–892.https://doi.org/10.29333/iji.2021.14351a
- Tolorunleke, E. A., Haruna, M. M., & Olugbade, D. (2023). Influence of Tertiary Students Usage of Online Collaborative Tools for Learning and Improving Academic Performance in Kogi State Nigeria. Journal of Science, Technology and Mathematics Pedagogy, 1(1), 59-68.
- Yusuf, M. O., & Afolabi, A. O. (2010). Effects of computer assisted instructed (CAI) on Secondary School Students performance in Biology. *The Turkish online Journal of Educational Technology*, 9(1), pp.62-69.
- Yekini, N. A. (2014). ICT (Concepts and Application). Self-Directed and Learning Approach. Hasfem Publication.