

# Effects of Webquest Learning Strategies on Citizenship Education Learning Outcomes of Pre-service Teachers in Colleges of Education in South-western Nigeria

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## Abstract

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*The purpose of this study was to investigate the effects of Webquest learning strategy on the citizenship education learning outcomes of pre-service teachers in colleges of education in South-western Nigeria. The study adopted a quasi-experimental research design with a pretest-posttest control group. Intact classes of pre-service teachers were used in purposively selected two federal and two state colleges of education spread over the South-western states of Nigeria. In Oyo State, the Federal College of Education (Special), Oyo (experimental group) made use of intact classes of pre-service teachers taught with the use of Webquest while the College of Education, Lanlate (control group) made use of the conventional strategy. In Ogun State, Federal College of Education, Abeokuta was the experimental group, while Tai Solarin College of Education, Ijebu-Ode was used as the control group. Data were collected using a Citizenship Education Learning Outcomes Test (CELOT) and analysed using descriptive and inferential statistics. The findings showed that the pre-service teachers in the experimental group have significantly higher mean scores on the CELOT. Also, the results revealed that the Webquest learning strategy had a significant effect on the pre-service teachers' cognitive and affective learning outcomes in citizenship education. The study recommended that using Webquest strategy in teaching citizenship education concepts enable pre-service teachers acquire the environmental concepts and improve their level of achievement instead of depending only on the conventional method. Also, it draws the attention of the Federal Ministry of Education and the National Commission for Colleges of Education to the importance attached to employing Webquest strategy in teaching citizenship education concepts.*

**Key Words:** Webquest, Pre-service teacher, Learning strategy, Citizenship education

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## Introduction

The acquisition and development of the right type of knowledge, positive attitude and social skills through education are paramount to the survival of any nation aspiring to be great. This is very much relevant to the Nigerian society as contained in Nigeria's National Policy on Education. The Federal Government of Nigeria (FRN; 2012) recommends Citizenship education as a crucial part of the curriculum of Nigerian colleges of education recommended by the National Commission for Colleges of Education (NCCE). Citizenship education, as a course of study, aims at preparing recipients to become responsible citizens who can make positive contributions toward societal development. The worldwide recognition of the importance of citizenship education has led to its inclusion in the educational curriculum of many countries, including Nigeria. Despite this pride of place accorded citizenship education, the

conventional strategy mainly adopted for its teaching has been criticized for being too theoretical and that a lot of students still lack the knowledge, attitudes and skills required for national development. There is, therefore, an on-going concern for the need to ensure that the teaching strategy employed for the teaching and learning of citizenship education is more effective in achieving learning outcomes. A strategy that is gaining popularity in recent years is the Webquest learning strategy. Webquest is a learner-centered, inquiry-based and technological learning strategy designed by educators to make students actively involved in learning through the use of the internet. The strategy is in line with the constructive learning theory which focuses on involving learners in the construction of their own learning. The aim of this study, therefore, is to investigate the effectiveness of Webquest learning strategy in improving the learning outcomes of pre-service

teachers in citizenship education in Southwestern Nigeria.

Thus, the introduction of Citizenship education is a deliberate attempt to equip citizens with the right type of knowledge, attitudes and skills capable of making them to participate as effective and efficient members of their democratic societies. As a result, citizenship education is now a subject of national concern as it is being taught in all levels of Nigeria's educational system.

Meanwhile, much is expected from citizenship education and so, the teaching strategy that would be more effective in enhancing the development of the right type of knowledge, attitudes, values as well as useful skills as the subject desires must be such in which learners are actively and cooperatively involved in the construction of their own knowledge. This requires that certain strategies should be adopted for the effective teaching and learning of this course. At present, however, there is a dearth of empirical evidence as to which teaching strategy could be more effective in handling the course. A new strategy that is now gaining grounds for the teaching of school courses, especially in America, is called Webquest. As technological innovations like fax machines, blogs, podcasts, skype, email, internet, cell phones, computers, video conferencing, pagers, face book, digital cameras, are influencing all facets of life, it is becoming increasingly necessary to introduce technology into the school curriculum with a view to observing their effectiveness in improving teaching and learning and making learners relevant for the tasks ahead of them. The Webquest is defined by Dodge (1997) as an inquiry-oriented activity in which some or all of the information that learners interact with come from resources on the internet, optionally supplemented with video conferencing. Its effectiveness for the teaching and learning of citizenship education has, however, not been conclusively determined. This study is, therefore, based on the premise that if pre-service citizenship education teachers are equipped with a new strategy like the Webquest,

it would go a long way in making citizenship education achieve the purpose for which it was introduced into the higher institution curriculum.

### **Statement of the Problem**

Citizenship education is a critical component of teacher education, as it equips pre-service teachers with the knowledge, skills and attitudes required to become responsible and participatory members of the society. However, research suggests that many pre-service teachers in Nigeria do not receive adequate training in citizenship education which can limit their ability to teach this subject very well. Furthermore, the conventional teaching strategy may not be sufficient to address the challenges of citizenship education in this digital age where learners are increasingly being exposed to a wide spectrum of information sources.

Webquest, as a digital learning strategy has shown promise in enhancing learning outcomes in subjects like English language, Biology and Mathematics, among others. However, there is limited research on the use of as a learning strategy for pre-service teachers in Nigeria.

Therefore, this study aimed to investigate the potential effectiveness of using Webquest learning strategy to enhance citizenship education learning outcomes among pre-service teachers in colleges of education in Southwestern Nigeria. The study sought to identify the impact of Webquest on both cognitive and affective learning domains learning of pre-service teachers. Through this, the study sought to address the critical gap in literature and contribute to the development of effective teacher education programs in Nigeria. It, therefore, used the quasi-experimental design so as to compare the learning outcome of intact classes of pre-service teachers who received Webquest learning strategy with those who received conventional instruction in citizenship education. The study aimed to contribute to the literature on citizenship education, and teacher education in Nigeria. It is anticipated that the use of Webquest as a learning strategy will improve

pre-service teachers' citizenship education learning outcomes. Citizenship education is a course of study recognized all over the world as a deliberately planned body of knowledge with the purpose of making recipients willingly perform their responsibilities. In the modern time, there has been a growing concern on how to make the teaching and learning of this course more effective by way of introducing technology into its teaching, instead of sole dependence on the "chalk and talk" conventional strategy. A major criticism against the traditional method is that it is too boring and less interactive. Therefore, the aim of this study was to investigate the effects of Webquest learning strategy on the learning outcomes of pre-service teachers in citizenship education in Southwestern Nigeria. The expected results of the study will provide insights into the effectiveness of Webquest learning strategy in improving citizenship education learning outcomes of pre-service teachers. In addition, the study will contribute to the development of effective strategies for teaching and learning citizenship education in Nigeria.

### **Objectives of the Study**

The primary objective of this study was to investigate the effects of Webquest learning strategy on the learning outcomes of pre-service teachers in citizenship education. The specific objectives are:

1. To compare the learning outcomes of pre-service teachers who receive Webquest learning strategy with those who receive conventional instruction in citizenship education.
2. To determine the pre-service teachers' perception of Webquest learning strategy in citizenship education.
3. To identify the challenges that pre-service teachers may encounter when using Webquest learning strategy in citizenship education.

### **Literature Review**

Atolagbe (2015) opines that citizenship education, as a subject of national concern, aims

at making recipients conscious of their civic responsibilities and perform them in order to show their commitment to national development. According to Atolagbe, the chief aim of citizenship education is to make learners responsible and participatory members of their society. However, with the criticism against the conventional teaching strategy that is mostly adopted for citizenship education, there has been the quest for a more effective strategy. There are research-based findings to suggest learners' active involvement in the learning process as a more effective strategy. Incidentally, this is the main thrust of the constructive learning theory that can be traced through Piaget, Dewey, and Vygotsky to Kant. The constructivists emphasize that the teacher is not just a transmitter of knowledge, but a facilitator and provider of experiences from which learners will tap and learn. Learners, too, should not be knowledge absorbers but rather, active participants in constructing their own meaning on the basis of strongly held perceptions (Mahoney, 2004, Larochelle & Desautels, 2009). In a research by Hsu, Wang, & Wu (2018), it was discovered that active learning activities, such as case studies and problem-based learning can enhance students' ability to think critically and make informed decisions in the context of citizenship education. In addition, Oesterreich & Mortensen (2018) found that active learning activities, such as community service projects and simulations, can help students develop a greater understanding of their roles as responsible citizens and promote civic responsibility.

Furthermore, in a research conducted by Parker & Hess (2018) it was discovered that active learning activities, such as mock elections and policy debates, can help students develop the skills and attitudes necessary to participate actively in democratic processes. Similarly, the research of Barberá & Alonso (2021) confirmed that active learning activities, such as role-playing and community-based projects can help students develop a sense of civic identity and belonging in relation to their communities and broader society.

Aside the quest for activity-based strategy for the teaching and learning of citizenship education, there has also been indications that as the world is going technological; such quest should extend to technology-based strategies. Meanwhile, some studies have been carried out which resulted in proving that technology can improve learning outcomes (Acevedo & Aleem 2019, Blackwell & Lauricella 2019). A type of technology being employed in the teaching-learning process in the recent years is the Webquest. Dodge (2001) that invented the Webquest strategy maintained that it takes a problem-solving approach and exhibits a clear structure that guides the learning processes and interactions and can be used for different subject areas across age levels, from young children to adult learners.

Many studies have been conducted on Webquest learning strategy in various subjects, including science, mathematics, and social studies. For instance, in a study carried out by Foley & Killion (2003) findings showed that Webquest helped to improve students' reading comprehension and critical thinking skills in English language arts. Webquest also enabled participants to engage in authentic and meaningful tasks which helped to enhance their understanding of the text Likewise, a study by Wang & Chen (2015) investigated the effects of Webquest learning strategy on the learning outcomes of high school students in biology. The study found that Webquest learning strategy significantly improved students' learning outcomes compared to conventional instruction. Correspondingly, the study by Al-Balushi & Al-Mamari (2017) confirmed the effectiveness of Webquest learning strategy in improving

students' learning outcomes in mathematics. The study found that Webquest learning strategy significantly improved students' learning outcomes in mathematics. These studies suggest that Webquest learning strategy can be effective in improving learning outcomes in other various subjects, especially citizenship education.

**Methodology**

The study adopted a pretest posttest control group quasi-experimental designed to compare the effectiveness of Webquest learning strategy with the conventional instruction strategy in teaching citizenship education. The above outlay shows a 3x3x2 factorial design comprising treatments at three levels: X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, by academic ability manipulated at three levels (high, medium and low) and gender also manipulated at two levels (male and female).

Where:

X<sub>1</sub> = Webquest Learning Strategy

X<sub>2</sub> = Cooperative Learning Strategy

X<sub>3</sub> = Conventional Strategy

**Conceptual Model of the Design**

Experimental Group (E<sub>1</sub>): O<sub>1</sub> X<sub>1</sub> O<sub>2</sub>

Experimental Group (E<sub>2</sub>): O<sub>1</sub> X<sub>2</sub> O<sub>2</sub>

Control Group: (C): O<sub>1</sub> X<sub>3</sub> O<sub>2</sub>

Where:

X<sub>1</sub>, represents treatment for the Experimental Group I E<sub>1</sub> (Webquest-based Learning),

X<sub>2</sub>, represents treatment for the Experimental Group II E<sub>2</sub> (Cooperative Learning),

X<sub>3</sub>, represents treatment for the Control Group,

O<sub>1</sub>, O<sub>2</sub>, O<sub>3</sub> are the pre-tests given to all the three groups,

O<sub>1</sub>, O<sub>2</sub>, O<sub>3</sub> are the post-tests given to all the three groups.

**Univariate Analysis of Variance Between-Subjects Factors**

		Value Label	N
Treatment	1.00	Webquest-based Learning	378
	2.00	Cooperative Learning	356
	3.00	Conventional Learning	355
Academic Ability	1.00	Low	449
	2.00	Medium	357
	3.00	High	283
Gender	1.00	Male	318
	2.00	Female	771

**Treatment \* AcademicAbility**

Dependent Variable: PostKnowledge

Treatment	Academic Ability	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Webquest-based Learning	Low	25.063 <sup>a</sup>	.350	24.376	25.750
	Medium	24.700 <sup>a</sup>	.407	23.901	25.498
	High	24.711 <sup>a</sup>	.402	23.923	25.500
Cooperative Learning	Low	12.872 <sup>a</sup>	.404	12.080	13.664
	Medium	11.995 <sup>a</sup>	.454	11.104	12.885
	High	12.587 <sup>a</sup>	.511	11.585	13.589
Conventional Learning	Low	18.269 <sup>a</sup>	.382	17.519	19.019
	Medium	18.517 <sup>a</sup>	.393	17.746	19.287
	High	18.328 <sup>a</sup>	.579	17.191	19.464

a. Covariates appearing in the model are evaluated at the following values: PreKnowledge = 11.1635.

**Treatment \* AcademicAbility \* Gender**

Dependent Variable: PostKnowledge

Treatment	Academic Ability	Gender	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Webquest-based Learning	Low	Male	25.155 <sup>a</sup>	.558	24.059	26.250
		Female	24.971 <sup>a</sup>	.422	24.143	25.800
	Medium	Male	24.873 <sup>a</sup>	.654	23.589	26.157
		Female	24.526 <sup>a</sup>	.484	23.576	25.477
	High	Male	24.339 <sup>a</sup>	.638	23.086	25.592
		Female	25.084 <sup>a</sup>	.488	24.126	26.041
Cooperative Learning	Low	Male	13.098 <sup>a</sup>	.702	11.721	14.474
		Female	12.646 <sup>a</sup>	.396	11.870	13.422
	Medium	Male	11.949 <sup>a</sup>	.785	10.408	13.490
		Female	12.040 <sup>a</sup>	.450	11.157	12.923
	High	Male	11.962 <sup>a</sup>	.904	10.188	13.736
		Female	13.212 <sup>a</sup>	.473	12.284	14.139
Conventional Learning	Low	Male	18.429 <sup>a</sup>	.657	17.140	19.717
		Female	18.110 <sup>a</sup>	.389	17.346	18.874
	Medium	Male	18.055 <sup>a</sup>	.654	16.771	19.339
		Female	18.978 <sup>a</sup>	.436	18.123	19.833
	High	Male	17.986 <sup>a</sup>	1.009	16.007	19.966
		Female	18.669 <sup>a</sup>	.564	17.563	19.775

a. Covariates appearing in the model are evaluated at the following values: Pre Knowledge = 11.1635.

**Treatment**

**Estimates**

Dependent Variable: PostAttitude

Treatment	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Webquest-based Learning	65.436 <sup>a</sup>	.813	63.840	67.031
Cooperative Learning	59.234 <sup>a</sup>	.964	57.342	61.126
Conventional Learning	45.188 <sup>a</sup>	.963	43.298	47.078

a. Covariates appearing in the model are evaluated at the following values: PreAttitude = 44.6575.

**Treatment \* AcademicAbility**

Dependent Variable: PostAttitude

Treatment	AcademicAbility	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Webquest-based Learning	Low	65.442 <sup>a</sup>	1.273	62.943	67.940
	Medium	65.305 <sup>a</sup>	1.480	62.401	68.208
	High	65.561 <sup>a</sup>	1.459	62.697	68.424
Cooperative Learning	Low	58.870 <sup>a</sup>	1.461	56.004	61.736
	Medium	58.392 <sup>a</sup>	1.644	55.166	61.617
	High	60.440 <sup>a</sup>	1.857	56.797	64.083
Conventional Learning	Low	45.797 <sup>a</sup>	1.383	43.082	48.511
	Medium	45.674 <sup>a</sup>	1.426	42.875	48.472
	High	44.093 <sup>a</sup>	2.094	39.984	48.201

a. Covariates appearing in the model are evaluated at the following values: PreAttitude = 44.6575.

**6. AcademicAbility \* Gender**

Dependent Variable: PostAttitude

AcademicAbility	Gender	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Low	Male	56.857 <sup>a</sup>	1.342	54.223	59.490
	Female	56.549 <sup>a</sup>	.844	54.892	58.206
Medium	Male	56.504 <sup>a</sup>	1.467	53.625	59.383
	Female	56.409 <sup>a</sup>	.957	54.531	58.286
High	Male	57.300 <sup>a</sup>	1.808	53.752	60.849
	Female	56.096 <sup>a</sup>	1.068	54.000	58.191

a. Covariates appearing in the model are evaluated at the following values: PreAttitude = 44.6575.

### Tests of Between-Subjects Effects

Dependent Variable: PostSkills

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	95871.862 <sup>a</sup>	18	5326.215	28.587	.000	.325
Intercept	143545.191	1	143545.191	770.453	.000	.419
PreSkills	26446.013	1	26446.013	141.944	.000	.117
Treatment	46724.922	2	23362.461	125.394	.000*	.190
AcademicAbility	601.818	2	300.909	1.615	.199	.003
Gender	258.331	1	258.331	1.387	.239	.001
Treatment *						
AcademicAbility	668.593	4	167.148	.897	.465	.003
Treatment * Gender	505.271	2	252.635	1.356	.258	.003
AcademicAbility *						
Gender	517.944	2	258.972	1.390	.250	.003
Treatment *						
AcademicAbility *	336.848	4	84.212	.452	.771	.002
Gender						
Error	199354.680	1070	186.313			
Total	3513880.000	1089				
Corrected Total	295226.542	1088				

a. R Squared = .325 (Adjusted R Squared = .313)

### Estimated Marginal Means

#### Treatment

#### Estimates

Dependent Variable: Post Skills

Treatment	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Webquest-based Learning	61.750 <sup>a</sup>	.739	60.301	63.200
Cooperative Learning	57.705 <sup>a</sup>	.870	55.999	59.411
Conventional Learning	44.019 <sup>a</sup>	.873	42.306	45.732

a. Covariates appearing in the model are evaluated at the following values: Pre Skills = 41.3848.

### Discussion of Results

The major issue addressed in this study was to determine the effect of Constructivist-Model-Based training programmes (Webquest and Cooperative Learning) on pre-service teachers' knowledge, attitude and social skills on pre-service teachers' achievement in Citizenship

education concepts. In addition, the study sought to find out the interaction effects among treatments, academic ability and gender of pre-service teachers' achievement and attitude to Citizenship education concepts.

The decline in students' achievement and attitude over the years is attributed to the

teacher-centred teaching methods with the teacher dominating at the expense of students not being encouraged to construct their own knowledge or take active part in their learning so as to involve them as the knower and as socio-constructors of learning necessitated the present study.

In this study, therefore, the constructivist (Webquest and cooperative learning) strategies were used so that teachers acted in their capacity as a neutral agent or facilitator of learning. The students who the strategy sought to empower take charge of their own learning by copying expert model to improve their own mental modeling (Olosunde & Akinpelu, 2013).

The mean score of pre-service teacher exposed to Webquest is ( $X=24.83$ ) and that of conventional strategy had a mean value of ( $X=18.37$ ) while cooperative learning had a mean value of ( $X=12.48$ ) when tested statistically using ANCOVA, the difference in their means was significant. This led to the rejection of the null-hypothesis. This implies that when pre-service teachers were exposed to treatment, a better result was achieved with Scheffe post-hoc analysis which revealed that (WBLS) was significantly different from (CL) and (CS) in their Citizenship education skills scores. Also, the experimental group I (WBLS) earned a mean score that is significantly higher than those of cooperative learning group and the control group (CL) and Conventional Strategy [CS]. The values are 61.75, 57.70 and 44.02 respectively.

The result of this study showed that Webquest model based strategy was superior to the conventional and cooperative strategies in enhancing achievement and attitude towards Citizenship education concepts. This agrees with (Bruton, 2005). With regards specifically to learning and achievement, the Webquest strategy leaves a space for thinking, searching and enquiring which made the teacher the centre of the learning process instead of the teacher as it is in the conventional method. Therefore, this made the difference in acquiring Citizenship concepts skills better among the members of the

Webquest group than the control and Cooperative groups respectively and the result is in agreement with the studies conducted by Al-eqwan (2014).

Webquest strategy also had a significant effect and improved achievement and attitude towards Citizenship education concepts. This is in agreement with the study conducted by Abbit and Ophus (2005). Webquest Instructional strategy on teaching and learning is often praised as an inquiry-oriented activity which effectively integrates technology into teaching and learning. The researchers believed that using Webquest-based project in some Citizenship education courses would be useful for pre-service teachers of Citizenship education oriented with technology use and open windows for them to integrate such into their future teaching. This supports the claim of Abbit and Ophus (2008) who expressed that some factors enhancing learning such as increased motivation and integration of technology into teaching and learning can be positively affected by using Webquest.

On the other hand, the cooperative learning strategy had the least mean scores in attitude and achievement in Citizenship education concepts as in line with the studies of (Johnson & Johnson, 2009, Adams, Charles & Hamm, 1990). This may be due to low interaction level on the part of the pre-service teachers in different groups, social skills as well as academic abilities of the pre-service teachers exposed to the cooperative learning strategy despite the benefits inherent in using cooperative learning such as economic benefits, value of time, division of labour and sharing. This made Webquest strategy group had higher mean scores as the schools are moving towards implementing higher technology (Johnson & Johnson, 2001) and computers being the norm, students are able to gain more skill through computer per tutoring in a cooperative setting.

The study also revealed that Webquest strategy improved attitude and social skills of pre-service teachers in Citizenship Education concepts. This is in agreement with the findings of Hendrix (2008) who noticed that teachers

have traditionally relied on large group instruction. Research, however, has shown that students learn better through active involvement in activities. Small group interaction and interest is sustained with the use of technologies (Slavin, 1995). For over two decades, Webquest learning strategies have been increasingly used in classrooms in developed countries as alternatives to traditional classrooms strategy and, in recent times, the strategy has been advocated in developing countries (Mills & Durdem, 1992; Salvin, 1991). The reasons for these positions are that Webquest learning strategies have positive effects on content learning, overall student achievement, attitude, students' self-esteem and time-on task (Mills & Durdem, 1992).

### **Conclusion**

Attempt has been made in this study to examine the effects of Webquest, cooperative learning and conventional strategy on Citizenship education pre-service teachers' attitude, knowledge and social skills in colleges of education in South-Western Nigeria. The findings of this study revealed that Webquest strategy has been found to produce effective improvement of pre-service teachers' achievement, attitude and social skills in Citizenship education concept than conventional and cooperative learning strategies. It becomes pertinent, therefore, not only to pay attention to the training of pre-service teachers in the essential features of Webquest for use in tertiary institutions for teaching Citizenship educations.

The findings of the study have also shown that Webquest strategy is more efficacious than conventional and cooperative strategies. Pre-service teachers exposed to Webquest strategy achieved better than other strategies and the use of the strategy is independent of gender and academic ability of the pre-service teachers used. The findings also showed that pre-service teachers' achievement, attitude and social skills is not attributed to the interaction effect of teaching strategies, gender and academic ability. Hence, it can be concluded

that Webquest-based instructional strategy improves pre-service teachers' achievement, attitude and social skills in Social studies concepts.

### **Recommendations**

Based on the results of the study, which showed the effectiveness of the Webquest strategy, the following recommendations are proffered by the researchers:

- I. Using the Webquest strategy in teaching Citizenship education concepts and not only depending on the conventional method enables pre-service teachers acquire the environmental concepts and to improve their level of achievement.
- ii. The Federal Ministry of Education's attention is being drawn to the importance of training the Citizenship education pre-service teachers through NCCE by employing the Webquest strategy in teaching Citizenship education concepts.
- iii. The curriculum designers attention are directed to use Webquest strategy in acquiring the citizenship education concepts in the field planning and building the curricula.
- iv. Integrating ICT into teaching and learning requires a robust technological infrastructure and adequate technical care support. Consequently, the school must provide computers, electronic, network and stable electricity. Teachers must also have access to on-site technical support. Pre-service teachers who are responsible for trouble shooting assistance after the use of the technology and lesson must also be put in place.
- v. Integrating Webquest in all subject areas in the educational system is an important way of developing teachers professionally development to help learners choose the most appropriate technologies and instructional strategies in ICT.

### **References**

Abbitt, J. & Ophus, J. (2008). What do you know

- about the impacts of Webquests: A Review of Research. *AACE Journal* 16(4). 441-456.
- Acevedo, J., & Aleem, A. (2019). An exploratory study of the effects of a Webquest on student motivation and critical thinking in a first-year seminar. *Journal of General Education*, 68(1), 1-19.
- Adams, C. & Hamm, M. (1990). *Cooperative learning: Critical thinking and collaboration across the curriculum*. Charles, C. Thomas Publisher.
- Al-Balushi, S. M., & Al-Mamari, H. M. (2017). The effectiveness of webquest in developing EFL students' writing skills. *Journal of Language Teaching and Research*, 4(1), 130-136.
- Al-eqwan, M. S. (2014). The effectiveness of webquests in developing information searching skills among secondary students in Jordan. *Journal of Education and Practice*, 59(14), 1-10.
- Atolagbe, S. A. (2015). *Elements of citizenship education*. Agbonda, Kwara: Tobistic Printing and Publishing Ventures.
- Barberá, E., & Alonso, E. (2021). Active learning and civic identity development: The role of engagement, learning approaches, and learning outcomes. *Frontiers in Psychology*, 12, 652386.
- Blackwell, C. K., & Lauricella, A. R. (2019). Assessing and supporting young children's digital citizenship. In *Handbook of Child Development and Digital Media*, (pp. 407-426). Springer.
- Bruton, A. (2005). Task-based language teaching: For the state secondary FL classroom? *Language Learning Journal*, 31 (1), 55-68.
- Dodge, B. (1997). *Some thoughts about Webquests*. Retrieved from [http://babylon,k12.ny.us/usconstitution/focus\\_5&20rules.pdf](http://babylon,k12.ny.us/usconstitution/focus_5&20rules.pdf) on 10th March, 2012.
- Dodge, B. (2001). Focus: Five rules for writing a great Webquest. Retrieved from <http://babylon.k12.ny.us/usconstitution/focus-5%20rules.pdf> on 23<sup>rd</sup> March, 2022.
- Federal Republic of Nigeria. (2012). Minimum standards for general education. Abuja: NCCE.
- Foley, G; & Killion, J. (2003). Using Webquests to teach content: Comparing instructional strategies. *The Reading Teacher*, 56(7), 676-684.
- Hendrix, D. (2008). An analysis of bibliometric indicators, national institute of health funding and faculty size at Association of Medical Colleges medical schools, 1997 – 2007. *Journal of the Medical Library Association, JMLA*, 96(4), 324.
- Hsu, Y.-C., Wang, S.-K., & Wu, J.-R. (2018). The effects of Webquest on students' civic competence and engagement in Taiwan. *Journal of Educational Computing Research*, 56(8), 1309-1333.
- Johnson, D.W. & Johnson, R. (2009). An educational psychology success story: social interdependence theory and cooperative learning. *Educational researcher*, 38, 365. Retrieved from <http://edr.sagepub.com/cgi/content/abstract/38/5/365> on 10th November, 2014.
- Johnson, D.W., Johnson, R.T. & Smith, K.A. (2001). Cooperative learning: increasing College Faculty instructional productivity. ASHE-ERIC. *Higher Education Report No. 4* George Washington University.
- Larochelle, M. & Desautels, J. (2009). Constructivism and the "Great Divides". *Constructivist Foundations: An Interdisciplinary Journal* 4, (2). Retrieved from <http://www.univie.ac.at/constructivism/journal> on 29th December, 2022.
- Mahoney, M.J. (2004). What is constructivism and why is it growing? *Contemporary Psychology*. 49, 360-363.

- Mills, C. & Durden, W. G. (1992). Cooperative learning and ability grouping: An issue of choice. *Gifted Child Quarterly*, 36(1), 11-16.
- Oestereich, B., & Mortensen, T. (2018). Civic education in a digital age: A literature review on the opportunities and challenges for citizenship education in the digital age. *European Journal of Teacher Education*, 41(4), 495-510.
- Olosunde, G.R. & Akinpelu, S.O. (2013). Impact of constructivist model-based training programmes on pre-service teachers' knowledge, creativity, classroom practice and junior secondary schools learning outcomes in mathematics. *Journal of education and practice*, 4(23), 48-56.
- Parker, W., & Hess, R. (2018). Digital citizenship education: A review of the literature. *SAGE Open*, 8(3).
- Salvin, R.E. (1991). Achievement effects of ability grouping in secondary schools. A best evidence synthesis. *Review of Educational Research*, 60(3), 471-499
- Salvin, R.E. (1995). *Cooperative learning; theory, research and practice*. Boston: Allyn and Bacon.
- Wang, S. K., & Chen, C. H. (2015). Webquests as a technology-enhanced learning tool: A review of research literature from 1995 to 2012. *Journal of Educational Technology and Society*, 18(4), 11-21.