

Original Research Article

## Assessment of the Extent of Application of Assure Model in Lesson Development among Teachers in Rivers State, Nigeria

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**Abstract:** The study examines the application of ASSURE model in lesson development and delivery among teachers in Rivers State, Nigeria. Descriptive survey design was adopted for the study. The population of the study is 12, 988 teachers of basic education, Krejcre Morgan sampling size table was used to arrive at 371 out of which only 365 teachers participated (175 male and 190 female) drawn from rural and urban schools (168 rural and 197 urban schools teachers) of the study area. Teachers' Assessment on application of ASSURE Model (TAAM) questionnaire was developed by the researchers using the phases of ASSURE model. The questionnaires was given face validity by experts of Educational Technology and Measurement and Evaluation from Department of Educational Foundations, Rivers State University Port Harcourt. TAAM was tested among 20 teachers who were not involved in the study within Oyiabo metropolis, Rivers State and a reliability of 0.71 was obtained using Kuder-Richardson Formula (KR-21). The findings revealed that ASSURE model were applied in lesson development and delivery to a high extent. However, the findings also revealed the phases of the models where teachers were yet to apply to a high extent. Thus, it was recommended that adequate supervisions and sensitisation through workshop be given to enhance teachers' capacity in the analysis of learners' characteristics, selection of technology, media and stating of objectives appropriately and adequately.

**Keywords:** ASSURE Model, Lesson Development, Delivery, Teachers.

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### INTRODUCTION

Teaching plays a significant central roles in the entire educational process, as everyone around the world especially in Africa are yearning for adequate and quality education. Lots of researches, innovations and proposals have been introduced to help fashion out the possible way to enhanced teaching and learning (Udo, & Patrick, 2014). In pursuance of this task, good design, development of instruction and the use of appropriate methodology were observed to be part of what that enable better academic performance. As a result, several research have been carried out to ascertain the efficacy of methodology in teaching and learning, instructional pedagogy and number of models that aids instructional development were also developed (Adedapo & Opoola, 2021).

Averagely, the work of the teacher is one that determine what to teach, how to teach and who to teach. The teacher also have the responsibility of deploying all the available approaches, pedagogy and resources to

create positive and interactive learning environment to enhance the purpose of teaching. One of the ways teachers can achieve effective learning is by applying ASSURE model in lesson delivery (Tarsono, *et al.*, 2024). The ASSURE learning model was created and used to make an effective learning system in the teaching in the light of this assertion, the engagement of instructional system design is inevitable. Bajracharya, (2019) defined Instructional Design as "a process to develop directions and specifications using learning and instructional theory to ensure the quality of instruction" (p.1). Instructional Design is a systematic and reflective process of turning principles of learning and instruction into plans for instructional materials, activities, information resources and evaluation (Smith, *et al.*, 2005; Al-Khattati, *et al.*, 2019). This process is a sure way of deploying constructivism in the classroom when the adequate steps that integrate technology and instructions adhered to learning principles and one of the best model for getting this done is the use of ASSURE model.

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ASSURE model is classroom-oriented models used to improve teaching and learning outcomes in the classroom and most time considered as potential models for designing technology-enhanced learning (Bajrachrya, 2019; Lim, & Chai, 2008). Models in this category includes ASSURE, ADDIE, Gerlach and Ely Model, The Heinich, Molenda, Russell and Smalddino models (Gustafson, & Branch, 2002). ASSURE model is indeed a procedural classroom –oriented instructional design system model used to develop technology-integrated instructions. It is made up of six phases that ensure adequate scrutiny and lay credence to effective instruction (Bajrachrya, 2019; Engizli, & Uludog, 2023). The model have been proved to be effective in technology integration in the classroom (Kim, Downey, 2016).

The acronym ASSURE is derived from the following: A = analysis of learners S= standard objectives S=select strategies, media, and materials U=utilize technology, media, and materials, R= require learners' participation E=evaluate and revise. The phases are discussed below:

**Analysis:** Development of an instruction is usually targeted at a specific learners, hence the characteristics of the learners will come to play at the point of deciding what should make the content and how it should be presented. The target audience are to be analyzed based on attitude, age, grade, and learning style to enhance the design (Ibrahim, 2015). The media and technology for delivery of instructional content alongside the target population are essential part in the analysis (Bajrachrya, 2019). If the analysis is properly done it gives room to arrive at the goals to be achieve from the instruction.

**State Objectives:** the statement of objectives should be stated clearly, most importantly the objective should align to learning conditions as it relates to type of equipment, maps and other materials that maybe used, considering the level of proficiency of learners to both the materials and equipment (Batir & Sadi, 2021). This is very important for translating the needs and goals into objectives that are sufficiently specific to providing direction to the teacher.

**Selection of Media:** Selection of media and materials should be based on relevance to the subject content and the achievement of the stated objectives (Altın, 2021). Thus additional responsibility of the teacher will be to bridge new, old technology were such existing.

**Utilize technology, media and Materials:** The instructor must make the lesson interesting by choosing appropriate materials to be used by the learner. Even the classroom condition and equipment, light and facilities must be appropriate and suitable for good learning conditions. Appropriate materials is capable of enhancing learners' interaction in the classroom. Basically, the active engagement of learners in

participating induce creativity and give room for further discovery leading to improvement in learning. Smalddino *et al.*, (2008) provided five points approach as a gate to achievement. (i) Preview the materials; the teacher plan how to utilize the materials in advance, in order to be sure that classroom instructions delivery are done seamlessly. (ii) Prepare the materials – teachers or instructor will need to collect all the required materials including text, graphics and videos and many more for classroom instruction. (iii) Prepare the learning environment, (iv) Prepare the learners by providing detail information about the study outline; learning objectives, expected assessment and grading policies and (v) provide the learning experience by putting all the plan into action during classroom lesson presentation and interactions.

**Require Learners Participation:** instruction should provide ample opportunity for the learners to actively participate in the lesson and must be given adequate feedbacks for improvements. The lesson should include a variety of meaningful activities for the students to participate in problem solving and critical thinking (Altın, 2021).

**Evaluation and Revise:** evaluating the entire lessons is very crucial for further improvements. Lesson developers have that mandate of ensuring the evaluation of the lesson to see whether the stated objectives are achievable and weather the technology, media and materials deployed for the lesson are suitable, before presenting the lessons again, appropriate revision and correction must have been done (Smalddino *et al.*, 2015).

### Statement of the Problem

As a result of lots of curriculum reviews in Nigeria, the drive for activity based approach such as problem based learning, approach and group methods have been encouraged at basic education in Nigeria. This is aimed at improving the quality of instruction at both Primary and Secondary schools (Baran 2010). Yet, what is not clear is whether the teachers have the sufficient knowledge and experience that will enable their effectiveness in activity based approach which can be associated with constructivism. In line with this ambition of the ministry of education in Nigeria, some research were carried out to ascertain the effectiveness of teachers and students involvement in the new approach (Adedapo & Opoola, 2021).

More so, there is the introduction of technology into classroom instruction, this warrant the use of ASSURE model which is one of the best suitable model for instruction development and technology integration in the classroom. Adedapo & Opoola, (2021) assess the level of teachers' application of stages of Assure model in Oyo state and find out that UBE teachers were not able to assess learners characteristics, define objectives based on the three domain and utilize media in their lessons, this also became a pointer as to find out the extent in which basic education teachers in Rivers State have

utilize ASSURE model in their lesson development. These issue drives the need to critically assess the application of ASSURE model in lesson development and presentation in the classroom.

**Purpose of the study**

This study is assessing the extent of application of ASSURE model in lesson development by Rivers State teachers. Specifically the study shall determine the extent to which:

1. Teachers apply ASSURE model in lesson development and technology integration;
2. Urban and rural teachers’ application of stages of ASSURE model in lesson development and technology integration;
3. Male and female teachers’ application of ASSURE model in lesson development and technology integration in the classroom.

**Research Questions**

1. To what extent have teachers apply ASSURE model in lesson development and technology integration?
2. To what extent have urban and rural teachers apply the stages of ASSURE model in lesson development and technology integration?
3. What is the extent of male and female teachers’ application of ASSURE model in lesson development and technology integration in the classroom?

**Hypotheses**

**Ho<sub>1</sub>:** There is no significant difference between the extent to which teachers in urban and rural areas applying stages of ASSURE model in lesson development and technology integration.

**Ho<sub>2</sub>:** There is no significant difference between the extent to which male and female teachers apply ASSURE model in lesson development and technology integration.

**METHODOLOGY**

This study employed descriptive survey design, the population of this study is 12, 988 teachers of basic

education programme in Rivers State. Krejcie and Morgan (1970) sampling size formula was used to arrive at 373, while multistage sampling technique was used to arrive at 24 Junior Secondary Schools in Rivers South East senatorial zone. Furthermore, convenience sampling techniques was used to sample 365 (175 male and 190 female) out of 373 teachers required for the study. The demography of the sample include gender, rural and urban school teachers, there were 168 rural and 197 –urban schools teachers, the teachers used in this study were basic education teachers involved in lesson planning and development.

Teachers’ self-assessment on application of ASSURE model (TAAM) questionnaire was developed by the researchers using the components of ASSURE model to guide the study. The questionnaire have two sections, section A provides details on respondents’ personal information and demographic. The questionnaires was given face validity by experts of Educational Technology and Measurement and Evaluation from Department of Educational Foundations, Rivers State University Port Harcourt. TAAM was tested among 20 teachers who were not involved in the study in Oyigbo metropolis, Rivers State and a reliability of 0.71 was obtained using Kuder-Richardson Formula (KR-21).

TAAM was administered to teachers in 24 basic schools within Rivers South-East senatorial district. Out of the 373 questionnaire administered only 365 were successfully retrieved from the respondents. The data collected were analyzed using mean and standard deviation to answer research questions while the hypotheses were tested using t-test at 0.05 level of significance. A decision mean of 3.0 was calculated and used as the basis for decisions.

**RESULTS**

**Research Question 1:** To what extent do teachers apply the stages of ASSURE model in lesson development and technology integration in the classroom?

**Table 1: Mean response on the extent teachers apply the stages of ASSURE model in lesson development and technology integration**

S/N	Items	VHE	HE	N	LE	VLE	Mean	SD	Remarks
1.	Teachers ensure adequate analysis of learners in developing instructions.	64	57	40	62	142	2.56	1.55	Low Extent
2.	Objectives are properly stated in all instructions	78	114	111	15	47	3.44	1.24	High Extent
3.	Selection of technology, media and materials are determined at the point of developing the instructions	71	100	76	29	89	3.10	1.45	High Extent
4.	Teachers take cognizance and utilize media and materials in lesson development	55	53	58	81	118	2.58	1.45	Low Extent
5.	Teachers ensures learners’ participation	150	92	57	45	21	3.84	1.25	High Extent
6.	Teachers evaluate and revise each lesson	54	57	52	91	111	2.59	1.43	Low Extent
	<b>Grand mean</b>						<b>3.02</b>	<b>0.66</b>	<b>High Extent</b>

Table 1 shows the mean response on the extent teachers apply the stages of ASSURE model in lesson development and technology integration in the classroom. The items that indicates high extent application include: item 5: Teachers ensures learners' participation (mean = 3.84, SD=1.25) item 2: Objectives are properly stated in all instructions (mean = 3.44, SD=1.24) while the item where teachers application of ASSURE model was to a low extent were item 1: Teachers ensure adequate analysis of learners in developing instructions (Mean = 2.56, SD= 1.55), item

4. Teachers take cognizance and utilize media and materials in lesson development (mean =2.58, SD=1.45) and item 6. Teachers evaluate and revise each lesson (Mean =2.59, SD=1.43). The grand mean score of 3.02, SD 0.66 indicates that teachers to a high extent apply the stages of ASSURE model in lesson development and technology integration.

**Research Question 2:** To what extent have urban and rural teachers apply the stages of ASSURE model in lesson development and technology integration?

**Table 2: Mean response on the extent urban and rural teachers apply the stages of ASSURE model in lesson development and technology integration**

S/N	Items	Urban (n= 168)		Rural (n = 197)		Mean Set (n=365)	Remarks
		Mean	SD	Mean	SD		
1	Teachers ensure adequate analysis of learners in developing instructions.	3.67	1.05	3.24	1.35	3.46	High Extent
2	Objectives are properly stated in all instructions	2.65	1.61	2.48	1.49	2.57	Low Extent
3	Selection of technology, media and materials are determined at the point of developing the instructions	3.07	1.36	2.16	1.38	2.60	Low Extent
4	Teachers take cognizance and utilize media and materials in lesson development	3.45	1.30	2.79	1.50	3.12	High Extent
5	Teachers ensures learners' participation	3.95	1.17	3.74	1.31	3.84	High Extent
6	Teachers evaluate and revise each lesson	2.85	1.48	2.38	1.36	2.61	Low Extent
	<b>Grand mean</b>	<b>3.27</b>	<b>0.60</b>	<b>2.80</b>	<b>0.62</b>	<b>3.04</b>	<b>High Extent</b>

Table 2 revealed the mean response on the extent of urban and rural teachers application of the stages of ASSURE model in lesson development and technology integration in the classroom. The items that teachers apply to high extent were item 5: Teachers ensures learners' participation (urban mean = 3.95, SD=1.17, Rural mean =3.74 SD= 1.31), this was follows by item 1: Teachers ensure adequate analysis of learners in developing instructions (Urban mean = 3.67 Rural mean =3.24). The items that indicates application of ASSURE to low extent item 2: Objectives are properly stated in all instructions (Urban Mean = 2.65, Rural mean2.48) and item 6: Teachers evaluate and revise each lesson, Urban mean= 2.85, SD=1.48, and Rural mean=2.38, SD=2.38 and SD=1.36. From the table, the grand

mean response of urban teachers (Mean = 3.27, S.D = 0.60) is higher than the mean response of rural teachers (Mean = 2.80, S.D = 0.62). The overall grand mean score of urban school teachers (Mean=3.27, SD=0.60) while rural teachers over all mean (Mean= 2.80 SD=0.62). These mean scores indicates that to a high extent urban teachers apply the stages of ASSURE model in lesson development and technology integration while rural teachers applied the stages of ASSURE model to low extent.

**Research Question 3:** What is the extent do male and female teachers' application of ASSURE model in lesson development in technology integration in the classroom?

**Table 3: Mean response on the extent of male and female teachers' application of ASSURE model in lesson development in technology integration in the classroom**

S/N	Items	Male (n = 175)		Female (n = 190)		Mean Set (n=365)	Remarks
		Mean	S.D	Mean	S.D		
1.	Teachers ensure adequate analysis of learners in developing instructions.	2.49	1.52	2.62	1.57	2.56	Low Extent
2.	Objectives are properly stated in all instructions	2.56	1.48	2.59	1.42	2.58	Low Extent
3.	Selection of technology, media and materials are determined at the point of developing the instructions	3.01	1.47	3.18	1.43	3.09	High Extent
4.	Teachers take cognizance and utilize media and materials in lesson development	3.34	1.26	3.54	1.21	3.44	High Extent
5.	Teachers ensures learners' participation	3.77	1.28	3.90	1.22	3.83	High Extent
6.	Teachers evaluate and revise each lesson	4.06	1.09	3.98	1.10	4.02	High Extent
	<b>Grand mean</b>	<b>3.66</b>	<b>0.51</b>	<b>3.69</b>	<b>0.55</b>	<b>3.67</b>	<b>High Extent</b>

The result in Table 3 shows the mean response on the male and female teachers' application of ASSURE model in lesson development and technology integration in the classroom. The mean response of the respondents shows the items of stages where teachers apply ASSURE model to high extent are: 6; Teachers evaluate and revise each lesson (male=Mean = 4.06, SD=1.09 and female mean=3.98, SD=1.10), This was followed by item 5: Teachers ensures learners' participation (Male mean = 3.77 SD=1.28, female mean=3.90 SD=1.22) and others. The items with to low extent, mean score is item 1: Teachers ensure adequate analysis of learners in developing instructions (Male mean = 2.49, SD=1.52 and female mean=2.62, SD =1.57) and item 2:

Objectives are properly stated in all instructions (Male mean=2.65 SD=1.48, Female mean score =2.59, SD=1.42). However, the grand mean score of Male mean=3.66, SD=0.51 and Female mean score=3.69, SD 0.51 and the ground mean set 3.67 indicates that both male and female teachers apply ASSURE model to a high extent in lesson development and in technology integration in the classroom.

**Hypotheses**

**Ho<sub>1</sub>:** There is no significant difference between the extent to which teachers in urban and rural areas applying stages of ASSURE model in lesson development and technology integration.

**Table 4: Summary of t-test on the difference between the extent to which teachers in urban and rural areas applying stages of ASSURE model in lesson development and technology integration**

Teachers' location	N	Mean	SD	Df	t-test	Sig.	Remark
Urban	168	3.27	0.60	363	7.355	0.000	Significant
Rural	197	2.80	0.62				

Table 4 shows the summary of t-test on the difference between the extent to which teachers in urban and rural areas applying stages of ASSURE model in lesson development and technology integration. The mean response of urban teachers is 3.27 with a standard deviation score of 0.60. Similarly, the mean response of rural teachers is 2.80 with a standard deviation score of 0.62. from the table above, the value of t-test calculated is 7.355 with significance value of (0.000 < 0.05) at 363 degrees of freedom. It is concluded that there is

significant difference between the extent to which teachers in the urban and rural area schools apply stages of ASSURE model in lesson development and technology integration. Hence the null hypothesis one is rejected at 0.05 level of significance.

**Ho<sub>2</sub>:** There is no significant difference between the extent to which male and female teachers apply ASSURE model in lesson development and technology integration.

**Table 5: Summary of t-test on the difference between the extent to which male and female teachers apply ASSURE model in lesson development and technology integration**

Gender	N	Mean	SD	Df	t-test	Sig.	Remark
Male	175	2.96	0.65	363	-1.654	.099	NS
Female	190	3.07	0.66				

NS= Not Significant

The above table shows the summary of t-test on the difference between the extent to which male and female teachers apply ASSURE model in lesson development and technology integration. It shows that the mean response of male teachers is 2.96 with standard deviation score of 0.65 while the mean response of female teachers is 3.07 with standard deviation score of 0.66. It shows the t-test calculated value to be -1.654 and significant value of .099 > 0.05). therefore, the null hypothesis two is retained at 0.05 level of significance.

**DISCUSSIONS**

The findings from table 1 shows the extent to which teachers apply the stages of ASSURE model in lesson development and delivery in the classroom. The grand mean score of 3.02, SD 0.66 indicates that teachers

to a high extent apply the stages of ASSURE model in lesson development and technology integration. But, teachers had low extent in the application in the following areas: Teachers ensure adequate analysis of learners in developing instructions and delivery, Teachers take cognizance and utilize media and materials in lesson development and delivery and teachers evaluate and revise each lesson. This study align with Adedapo, *et al.*, (2021) whose study investigated the levels of integrating ASSURE model in lesson delivery of selected schools teachers in some selected primary schools in Oyo SUBEB in Nigeria and also identified that teachers indeed apply ASSURE model but did below average in terms of analyzing pupils characteristics, stating lesson objectives and utilization of instructional media. The study also in agreement with Kim, and Downey, (2016) who examine ASSURE model the schools, where the model was applied in collaboration with other pedagogical approaches and each had great gains.

The findings from research question 2 indicates that to a high extent, urban teachers apply the stages of ASSURE model in lesson development and technology integration while rural teachers applied the stages of ASSURE model to low extent. The difference in the extent of application can be associated with the environmental factors. As rural teachers may have little or less technology to involve in their classroom and the extent of supervision given to rural and urban schools may be factors that creates the differences. The study also analyzed the level of application based on gender. The testing of hypothesis revealed that there is no significant difference in the level of application of ASSURE model in the classroom with respect to gender. The implication of this study is that gender do not play any significant role in the use of ASSURE model in lesson development and delivery.

## CONCLUSION

This study evaluates the extent to which ASSURE model is used in the development and integration of technology in lesson delivery in Rivers State. The findings indicates to a high extent the use of ASSURE model by teachers at the basic education level. However, the study also revealed the stages of the models where teachers are yet to apply the model to a high extent. More so, the study also proved that away from any other factors teachers in the rural areas level of ASSURE model application in their lesson development and delivery was to low extent. Consequently, with the high level of ASSURE model application it calls for an assessment on the influence of the on students' performance in some selected topics and subject to further expatiate the impact of the model in instructional delivery.

## RECOMMENDATIONS

Based on the findings of this work, the following recommendations were made that:

1. Adequate supervisions and sensitisation of teachers through workshop should be given to enhance capacity in the analysis of learners characteristics, selection of technology, media and stating of objectives appropriately and adequately;
2. More attention should be given to teachers and schools in the rural areas in respect of lesson development and provision of technology in schools.
3. Specialist of instructional design should be involved in the supervision of teachers and schools.

## REFERENCES

- Adedapo, A. & Opoola, B. (2021). Level of integrating the assure model in lesson delivery of selected primary school teachers in Nigeria, *Journal*

*of Language Teaching and Research*, 1(12), 177-182. DOI: <http://dx.doi.org/10.17507/jltr.1201.19>.

- Altın, M. (2021). Evaluation of the effectiveness of English language instruction based on the ASSURE model. *E-International Journal of Educational Research*, 12(5). <https://doi.org/10.19160/e-ijer.1018149>.
- Al-Khattati, S. H. K., Habeeb, R. R., & Mohammed, A. R. (2019). An assure model instructional design based on active learning strategies and its effect for 1<sup>st</sup> intermediate student's higher order thinking skills in teaching sciences text book. *Psihologija*, 52(5), 339-349.
- Amiirch, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and language*, (1), 9-16.
- Batir, Z., & Sadi, Ö. (2021). A science module designed based on the ASSURE Model: Potential energy. *Journal of Inquiry Based Activities*, 11(2), 111-124.
- Baran, B. (2010). Experiences from the process of designing lessons with interactive whiteboard: ASSURE as a road map. *Contemporary Educational Technology*, 1(4), 367-380.
- Bajiracharya, J. R. (2019). Instructional design models: Assure and kemp, *Journal of Education and Research*, 9(2), 1-8.
- Engizli, S. I., & Uludag, A. K. (2023). The effect of blended learning activities based on the assure models in teaching on students and teachers in music lesson, *International Journal of Assessment Tools in Education*, 10(2), 303-330.
- Gustafson, K. L., & Branch, R. M. (2002). *Survey of instructional development models*. Syracuse University, Syracuse.
- Ibrahim, A. A. (2015). Comparative analysis between system approach, Kemp, and ASSURE instructional design models. *International Journal of Education and Research*, 3(12), 261-270.
- Kim, D., & Downey, S. (2016). Examining the use of assure models by K12 teachers, *Computers in the schools*, 33(30), 153-168, DOI: 10.1080/07380569.2016.203208.
- Lim, C. P., & Chai, C. S. (2008). Rethinking classroom-orientated instructional development models to mediate instructional planning in technology-enhanced environment. *Teaching and Teacher Education*, 24(8), 2002-2013. <https://doi.org/10.1016/j.tate.2008.05.004>
- Moore, K. J., & Knowlton, D. S. (2006). Students as library detectives and books as clues: Application of ISD in K12 schools. *Tech Trend*, 50(3), 59-63. <https://doi.org/10.1007//511528-006-7605>.
- Muna, A., & Kalam, M. A. (2021). Teaching and learning process to enhance teaching effectiveness: A literature review, *International Journal of Humanities and Innovation*, 4(1), 1-4.

- Smaldino, S. E., Lowther, D. L., & Russel, J. D. (2008). *Instructional technology and media for learning* (9<sup>th</sup> ed), Saddle River, N. J: Pearson.
- Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3<sup>rd</sup> ed). N.J: John Wiley & sons.
- Tarsono, Fitriani, Muchlis, A., Nupus, D., Azizah, N., & Rosyida, N. I. (2024). Evaluation of the application of the assure model based on the countenance stake model on rukhsah material in building effective learning, *Jurnal Pendidikan Islam*, 13(1), 19-32.
- Udo, A. L., & Patrick, J. U. (2013). System approach in science lesson delivery: An assessment of state colleges of education science lecturers in Akwa Ibom and Cross Rivers. *Journal of Educational Media and Technology*, 18(1), 106-113.

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