

UTILISATION OF INNOVATION AND HEALTH EDUCATORS JOB PERFORMANCE IN FEDERAL AND STATE OWNED COLLEGES OF EDUCATION IN DELTA STATE.

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**Abstract:**

*This study was undertaken to investigate utilisation of innovation and health educators' job performance in federal and state owned colleges of education in Delta state. The study used descriptive survey design. The population of the study was 77 health educators in the four Federal and State Colleges of Education in Delta State. The 77 health educators were used in the study due to their limited number. The instrument utilised in the investigation was titled "Utilisation of Innovation and Health Educators Job Performance Questionnaire" (UIHEJPQ)". The dependability of the instrument was established with the Pearson Product Moment Correlational Coefficient (r). Items on the instrument were assessed with the four points scoring scale of Strongly Agree (4 points), Agree (3 points), Disagree (2 points) and Strongly Disagree (1 point). From the 77 copies of the instruments administered, 71 copies were retrieved. Male health educators were 55 and female health educators were 16. 47 experienced health educators were used while 14 inexperienced health educators were as well utilised in the inquiry. Mean rating and standard deviation were utilised to answer the 5 research questions. z test was employed to test the two null hypotheses created to guide the investigation at 0.05 levels of significance. Findings showed that the forms of teaching approaches in health education that requires innovations, the forms of innovation needed by health educators, the factors responsible for utilisation of innovation among health educators, the consequences of non utilisation of innovation among health educators in their job performance, the strategies that can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state were high as the ratings were high. That there was no significant difference between male and female health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state. There was no significant difference between experienced and inexperienced health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state. It was concluded in the study the forms of teaching approaches in health education that requires innovations, the forms of innovation needed by health educators in their job performance, the factors responsible for utilisation of innovation among health educators in their job performance, the consequences of non utilisation of innovation have among health educators in their job performance, the strategies can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state were high. Male and female health educators do not differ significantly in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state. Experienced and inexperienced health educators do not differ significantly in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state. It was as well recommended among others that Delta state government should provide the required resources in the teaching of health education in the colleges of education to rebuild a free, all-inclusive and quality education scheme as education is internationally considered as a tool per excellence for social and monetary reform.*

**Key Words:** Delta State, Federal and State Owned Colleges of Education, Health Educators, Innovation, Job Performance, Utilisation of innovation.

## Introduction.

Health education is a procedure with rational, mental and social aspects concerning actions which boost the capabilities of populace to create knowledgeable judgments influencing their individual, family unit and neighborhood health. This procedure is based on scientific values, ease learning and behavioural alteration in health educators and students. The rationale for health education is to offer students with health awareness that will preserve and progress their current health and support them in increasing approaches and practices that will boost their prospective for health in their existence. The fundamental responsibility of teaching is to discover means to assist students study and develop, to design setting where alteration in the cognitive, social, effective and motor behaviour of students can be achieved efficiently. The escalating relevance of technology to schooling has guided many to articulate anxiety about the likelihood of not improving schooling. Globally governments are anxious on its health progress. Some of purpose of health education is to increase awareness, instill types of appropriate health behaviours and obtain scientific capability in health education.

The approaches for dealing with key health education problems are not commonly restricted but the desire for concern and choose approaches that are in the best interest of health educators and students and not the convenience of leaders. Stakeholders must guarantee that the health of the citizens is encouraged with health education (Odusanya, 2022). The utilisation of innovations will contribute to guidelines that eventually lead to desired results in health education. Idiris (2020) noted that effective health education planning should ensure use of innovation and take into account such implications. Colleges of education attain its health education objectives through innovations and health educator's efficiency in making easy instruction and scholarship procedures. Innovations are new ways of performance. Colleges of education characterised by change require health educators who are dedicated to the ideals and objectives of the colleges (Caudron, 2016).

With appropriate financial support and tackling the problems of teacher education, sexual-category, innovation in teacher education shall be positively influence for the advantage of the humanity in the 21<sup>st</sup> century (Umeodagu, 2025). 21<sup>st</sup> century teacher education is a period in things is varying and uneven (Chukwuma, 2025). Salami (2025) observed that required modification in teacher education institutions will be achievable if schooling of the 21<sup>st</sup> century has the prospective, correctly positioned to creating major input to social, economic, background and human growth while maintaining human uprightness. Federal Republic of Nigeria (1999) in section 18 subsection 3 of her constitution stated that to eradicate illeracy, it is necessary for young citizens to make occupation in teaching

**Theoretical Framework.** Theoretical framework was Marquardt (2024) theory of action scholarship and improvement in school obligation. The theory explained the procedures by which technology is used to enhance obligation among health educators in colleges of education. The theory assumes that improvement in teaching can be enhanced with action scholarship. It is a human resources improvement procedure, utilised to widen health educators' awareness, expertises and worth facilitating them to resolve difficult harms. Significant issues of action scholarship are intuitive inquiring, thoughtful paying attention, taking act on dilemmas and a obligation to scholarship. Action scholarship is built on the application of new questions to existing knowledge as well as reflection about actions. Authority and responsibility for analysis and implementation is conferred on individuals who psychologically own the problem and live with the proposed solution. Major aspects of action scholarship are problems, projects, challenges, issues, or tasks resolutions which are of high importance to individuals, teams, or the colleges of education.

**Investigation on Utilisation of Innovation and Health Educators Job Performance.**

In a related study, Tschannen-Moran and Barr (2024) establish that there was significant relationship because health educators use of innovation and quality teaching as well as students academic performance. In a related inquisition, Gumbo (2022) found that there was a significant relationship between innovations and job performance among health educators. In an investigation, Reardon and Scobell (2015) ascertained that there was significant relationship between acceptance of health as in area of instruction, use of innovation, teacher's development programme and job performance among health educators. In a related inquiry, Brown (2013) found that there was significant influence between staffing, scheduling, technology, training, use of innovation and job performance among health educators. In a similar inquiry, Bosomtwe (2025) observed that there was significant relationship between school setting and job performance among health educators.

In a comparable inquest, Schlechty (2020) established that there was a significant relationship between uncompetitive support and educational transformation. He further noted that colleges of education are not factories, and you cannot translate the systems of industrial unit into colleges of education successfully. In a similar analysis, Battle and Looney (2014) observed that health educators who not just have pleasure in instruction but analysis themselves are valuable are further prone to stay in teaching. Further findings showed that health educators satisfaction height in teaching profoundly persuade their probability of continuing the job. In an investigation Day (2006) instituted that health educators uniqueness are not simply created from procedural and sentimental features of instruction such as classroom administration, health education awareness, students' test outcome and their individual existence, but as well the outcome of an dealings between the health educators' experiences and the collective, intellectual and school setting.

The accountability for total health in current period of expertise is too difficult to be assigned to individual or cluster. Fast altering ecological and other existing circumstances, sustained scientific invention influence the health of people. If health education is to maintain tempo with alterations, progressive measures must commence to offer people with data and services required for the preservation of best possible exceptional health. Ineffective performance in colleges of education is an indication to administration to take remedial acts (Patrick, 2018). The environment should provide checks and balances in daily running of an organisation of the colleges to promote a spirit of team work and loyalty.

The job of health educators in upholding quality instruction and scholarship is vital (Gates, 2021). Health instruction is a difficult job, one that may be supported by making use of qualified health educators and innovation (Martinez, Frick, Kim, & Fried, 2020). Numerous health educators will admit that what they perform in the classroom is an indication of features of themselves, a combination of their own education, job experiences, personal psychology, availability of innovations for instruction, approaches on students and good judgment of their own capability or lack of it. Conditions that would make efficient instruction are innovations, assets obtainable to health educators, wideranging conditions of resources and instructional materials determine effectiveness in teaching (Kirunda, 2017). Innovations, restructuring and increase of health educators' centered progressivism alongside the scenery of increasing official procedure and more severe teacher appraisal arrangement (Cuban, 2023). The innovation uprising and its consequences have fashioned novelty in teaching that has exceeded anything developed on the scholarship sphere in the 21<sup>st</sup> century. In order to meet the resultant challenges, instruction must take place in colleges that differs in many ways from the conventional school building of yesteryears.

Statement of the Problem. Teacher education in Delta state colleges of education is a dependable instrument for producing teachers for pre-primary, primary and junior secondary school levels. Problems of health education job performance in federal and state owned colleges of education in Delta state are of concern to stakeholders. The health educators are not using innovation in teaching health education which is negatively influencing student's academic performance. No restructuring in colleges of education will progress students' education and academic performance if they lack innovations and competent health educators.

### Research Questions

The following research questions were raised in the study:

- 1 What are the forms of teaching approaches in health education that requires innovations in public colleges of education in Delta state?
- 2 What are the forms of innovation needed by health educators in their job performance in federal and state owned colleges of education in Delta state?
- 3 What are the factors responsible for utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state?
- 4 What consequences does non utilisation of innovation have among health educators in their job performance in federal and state owned colleges of education in Delta state?
- 5 What strategies can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state? Hypotheses:

The subsequent hypotheses were devised:

- 1 There is no significant difference between male and female health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.
- 2 There is no significant difference between experienced and inexperienced health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state

Purpose of the Study. The purpose of this study is to investigate utilisation of innovation and health educator's job performance in federal and state owned colleges of education in Delta state. Primarily, the researcher investigated: 1 Forms of teaching approaches in health education that requires innovations in federal and state owned colleges of education in Delta state.

2 Forms of innovation needed by health educators in their job performance in federal and state owned colleges of education in Delta state.

3 Factors responsible for utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state.

4 Consequences of non utilisation of innovation have among health educators in their job performance in federal and state owned colleges of education in Delta state.

5 Strategies can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state

6 Difference between male and female health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.

7 Difference between experienced and inexperienced health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state

Method: The study used descriptive survey design. Descriptive survey design are not merely limited to detail results, but frequently outcome in the creation of vital values of awareness and explanations to important problems (Orodho, 2013). The population of the study was 77 health educators in the four Federal and State Colleges of Education in Delta State. The 77 health educators were used in the study due to their limited number. The instrument utilised in the investigation was titled "Utilisation of Innovation and Health Educators Job Performance Questionnaire" (UIHEJPQ)". The instrument was validated through authority's opinion. The researcher employed the split-half procedure to examine the dependability of the instrument with piloting testing.

Reliability is a measure of the degree to which a study device attained dependable result or data after recurrent examination. It is the steadiness of measurement; the further dependable an instrument is, the additional dependable the measure (Kothari, 2019). The examiner employed split-half process to analysis the dependability of the tool with piloting. 20 health educators in College of Education Nsugbe, Anambra state were administered the instrument that was employed for the inquiry to determine the dependability. The dependability of the instrument was established with the Pearson Product

Moment Correlational Coefficient (r). The merit of Pearson Product Moment Correlational Coefficient (r) for forms of teaching approaches in health education that requires innovations was 0.81. The merit of Pearson Product Moment Correlational Coefficient (r) for innovation needed by health educators in their job performance was 0.79. The merit of Pearson Product Moment Correlational Coefficient (r) for factors responsible for utilisation of innovation among health educators in their job performance was 0.73. The merit of Pearson Product Moment Correlational Coefficient (r) for Consequences of non utilisation of innovation have among health educators in their job performance was 0.69. The merit of Pearson Product Moment Correlational Coefficient (r) for Strategies can be employed to encourage the utilisation of innovation among health educators in their job performance was 0.83. The merit of Pearson Product Moment Correlational Coefficient (r) for Difference between male and female health educators in their utilisation of innovation in their job performance was 0.73 and the merit of Pearson Product Moment Correlational Coefficient (r) for Difference between experienced and inexperienced health educators in their utilisation of innovation in their job performance was 0.86. The investigator with the support of skilled investigation assistance in the administration of the device was in the different colleges of education utilised in the investigation to administer the device to health educators who were employed and directed them on how the instrument were filled. Items on the instrument were assessed with the four points scoring scale of Strongly Agree (4 points), Agree (3 points), Disagree (2 points) and Strongly Disagree (1 point). The reactions of the sampled health educators were assessed and added up.

From the 77 copies of the instruments administered, 71 copies were retrieved. Male health educators were 55 and female health educators were 16. 47 experienced health educators were used while 14 inexperienced health educators were as well utilised in the inquiry. Mean rating and standard deviation were utilised to answer the 5 research questions. Mean rating of 2.50 was assumed as the significant level of receipt whereas mean rating beneath 2.50 was discarded.

z test was employed to test the two null hypotheses created to guide the investigation at 0.05 levels of significance.

Presentation of Results.

Research Question 1: What are the forms of teaching approaches in health education that requires innovations in public colleges of education in Delta state?

**Table 1:** Mean Rating of Respondents on the Forms of Teaching Approaches in Health Education that Requires Innovations in Federal and State Owned Colleges of Education in Delta state .

S/N	Forms of Teaching Approaches in Health Education that Requires Innovations in Federal and State owned Colleges of Education in Delta state	Male Health educators				Female Health Educators			
		N	X	SD	Decision	N	X	SD	Decision
1	Educational television.	55	4.03	1.03	+	16	3.97	0.73	+
2	Team teaching.	55	3.95	1.05	+	16	3.91	1.13	+
3	Teaching machinery.	55	3.91	0.81	+	16	3.87	0.75	+
4	Instructional materials centres.	55	3.87	0.73	+	16	3.81	0.85	+
5	Independent study areas.	55	3.79	1.12	+	16	3.77	1.13	+
6	Plural teaching areas in health education.	55	3.73	0.83	+	16	3.73	0.83	+
7	School support.	55	3.65	0.77	+	16	3.59	1.19	+
	Total		26.93	6.34			26.65	6.61	
	Grand Mean		3.85	0.91			3.81	0.94	

+ = Agreed, - = Disagreed

Data in Table 1 shows that the Mean rating from items 1 to 7 on the forms of teaching approaches in health education that requires innovations in public colleges of education in Delta state. The respondents agreed on all the 7 items that educational television, team teaching, teaching machinery, instructional materials centres, independent study areas, plural teaching areas in health education and school support are the forms of teaching approaches in health education that requires innovations in government colleges of education in Delta state.

Utilising the information in table 1 and the mean rating from items 1 to 7, the subsequent were noted. The sample for male health educators was 55 with mean rating of 3.85 and standard deviation of 0.91 and the sample for female health educators was 16 and mean rating of 3.81 and standard deviation of 0.94. Utilising the significant level of acceptance for the study as 2.50, the ratings of male and female health educators were higher than the significant level of acceptance. This implied that the forms of teaching approaches in health education that requires innovations in public colleges of education in Delta state were high as the ratings were high.

Research Question 2: What are the forms of innovation needed by health educators in their job performance in federal and state owned colleges of education in Delta state?

**Table 2: Mean Rating of Respondents on the Forms of Innovation Needed by Health Educators in their Job Performance in Federal and State Owned Colleges of Education in Delta state.**

S/N	Forms of Innovation Needed by Health Educators in their Job Performance in Federal and State Owned Colleges of Education in Delta state	Male Health educators				Female Health Educators			
		N	X	SD	Decisio n	N	X	SD	Decisi on
1	Investigations in educational technology.	55	4.03	1.03	+	16	3.97	0.73	+
2	Development of new teacher education programme	55	3.95	1.05	+	16	3.91	1.13	+
3	Development of new curriculum	55	3.91	0.81	+	16	3.87	0.75	+
4	School organization	55	3.87	0.73	+	16	3.81	0.85	+
5	School intergration	55	3.79	1.12	+	16	3.77	1.13	+
6	Compensation education.	55	3.73	0.83	+	16	3.73	0.83	+
	Total		23.28	5.57			23.06	5.42	
	Grand Mean		3.88	0.93			3.84	0.90	

+ = Agreed, - = Disagreed

The data in Table 2 shows that the mean rating from items 1 to 6 on the forms of innovation needed by health educators in their job performance in federal and state owned colleges of education in Delta state. The respondents agreed on all the 6 items that investigations in educational technology, development of new teacher education programme, development of new curriculum, school organization, school integration and compensation education are the forms of innovation needed by health educators in their job performance in federal and state owned colleges of education in Delta state.

Utilising the information in table 2 and the mean rating from items 1 to 6, the subsequent were noted. The sample for male health educators was 55 with mean rating of 3.88 and standard deviation of 0.93 and the sample for female health educators was 16 and mean rating of 3.84 and standard deviation of 0.90. Utilising the significant level of acceptance for the study as 2.50, the ratings of male and female health educators were higher than the significant level of acceptance. This implied that the forms of innovation needed by health educators in their job performance in federal and state owned colleges of education in Delta state were high as the ratings were high.

Research Question 3: What are the factors responsible for utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state ?

**Table 3: Mean Rating of Respondents on the Factors Responsible for Utilisation of Innovation among Health Educators in their Job Performance in Federal and State Owned Colleges of Education in Delta State .**

S/N	Factors Responsible for Utilisation of Innovation among Health Educators in their Job Performance in Federal and State Owned Colleges of Education in Delta State	Male Health educators				Female Health educators			
		N	X	SD	Decisio n	N	X	SD	Decisi on
1	Demand for accountability	55	4.03	1.13	+	16	3.98	1.03	+
2	Concern for the individuality of students.	55	3.97	0.79	+	16	3.96	0.79	+
3	To maximise the learning progress of students.	55	3.91	1.09	+	16	3.91	1.07	+
4	Expand the creative potentials of students	55	3.87	0.68	+	16	3.89	0.81	+
5	Looking for new content to enrich traditional offering of curriculum.	55	3.85	1.15	+	16	3.87	1.17	+
6	Creating learning settings that offers varied stimuli	55	3.77	0.75	+	16	3.83	0.85	+
7	Encouraging exploration among students	55	3.73	1.05	+	16	3.77	1.13	+
8	Motivating students to achieve desired results.	55	3.69	0.83	+	16	3.73	0.79	+
9	Influencing student's attitudes towards desirable directions.	55	3.65	1.09	+	16	3.65	1.09	+
10	More experimentation with procedures for eliciting creative responses among students	55	3.55	1.13	+	16	3.61	0.77	+
	Total	55	38.02	9.69	+	16	38.2	9.5	+
	Grand Mean		3.80	0.97			3.82	0.95	

+ = Agreed, - = Disagreed

Table 3 was on the factors responsible for utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state. The respondents agreed on all the 10 items that demand for accountability, concern for the individuality of students, to maximise the learning progress of students, expand the creative potentials of students, looking for new content to enrich traditional offering of curriculum, creating learning settings that offers varied stimuli, encouraging exploration among students, motivating students to achieve desired results, influencing student's attitudes towards desirable directions and more experimentation with procedures for eliciting creative responses among students.

Utilising the information in table 3 and the mean rating from items 1 to 10, the subsequent were noted. The sample for male health educators was 55 with mean rating of 3.80 and standard deviation of 0.97 while the sample for female health educators was 16 with mean rating of 3.82 and standard deviation of 0.95. Utilising the significant level of acceptance for the investigation of 2.50, the ratings of male and female health educators were higher than the criterion level of acceptance.

This implied that the factors responsible for utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state were high as the ratings were high.

Research Question 4: What consequences does non utilisation of innovation have among health educators in their job performance in federal and state owned colleges of education in Delta state?

**Table 4:** Mean Rating of Respondents on the Consequences of Non Utilisation of Innovation has by Health Educators in their Job Performance in Federal and State Owned Colleges of Education in Delta State.

S/N	Consequences of Utilisation of Non Innovation have among Health Educators in their Job Performance in Federal and State Owned Colleges of Education in Delta State .	Male Health educators				Female Health educators			
		N	X	SD	Decisio n	N	X	SD	Decisi on
1	Poor academic performance among students	55	3.95	0.81	+	16	4.03	1.13	+
2	Poor teaching.	55	3.93	1.15	+	16	3.97	0.77	+
3	Academic procrastination among students.	55	3.87	0.85	+	16	3.94	1.09	+
4	Examination malpractice.	55	3.81	1.13	+	16	3.89	0.79	+
5	Strike Actions among health educators.	55	3.77	1.05	+	16	3.85	1.13	+
6	Delay in academiccalendar .	55	3.75	0.93	+	16	3.55	0.83	+
7	Drug Abuse among students	55	3.68	1.15	+	16	3.73	1.14	+
8	Cultism among students	55	3.61	0.83	+	16	3.65	0.75	+
	Total		30.37	7.9			30.61	7.63	
	Grand Mean		3.80	0.99			3.83	0.95	

+ = Agreed, - = Disagree

The data in Table 4 shows that the mean rating of 2.50 on the consequences of non utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state. The respondents agreed on all the 10 items that poor academic performance among students, poor teaching, academic procrastination among students, examination malpractice, strike actions among health educators, delay in academic calendar, drug abuse among students and cultism among students.

Utilising the information in table 4 and the mean rating from items 1 to 8, the subsequent were discovered. The sample for male health educators was 55 with mean rating of 3.80 and standard deviation of 0.99 while the sample for female health educators was 16 with mean rating of 3.83 and standard deviation of 0.95. Using the significant level of acceptance for the investigation of 2.50, the ratings of male and female health educators were higher than the criterion level of acceptance. This implied that the consequences of non utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state were high as the ratings were high. Research Question 5: What strategies can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state?

**Table 5:** Mean Rating of Respondents on the Strategies Can be Employed to Encourage the Utilisation of Innovation among Health Educators in their Job Performance in Federal and State Owned Colleges Of Education In Delta State.

S/N	The Management Strategies that can be employed to encourage the utilisation of innovation and health educators job performance in federal and state owned Colleges of Education in Delta state in Delta state	Male Health educators				Female Health educators			
		N	X	SD	Decisio n	N	X	SD	Decisi on
1	Utilisation of emerging global best practices in teaching.	55	4.13	0.91	+	16	4.03	0.75	+
2	Adoption of model to promote innovations.	55	4.09	1.09	+	16	3.97	1.05	+
3	Utilisation of computer based learning in health education.	55	3.97	0.83	+	16	3.95	0.81	+
4.	Utilisation of computer based test in testing students in health education.	55	3.93	1.13	+	16	3.93	1.13	+
5	Health educators should read professional journals in general education	55	3.85	0.79	+	16	3.86	0.79	+
6	Conscious plan for the creation of high. quality innovators	55	3.75	1.09	+	16	3.73	1.03	+
7	Innovation in school curriculum.	55	3.71	0.91	+	16	3.65	1.07	+
8	In-service training for health educators	55	3.65	1.13	+	16	3.59	0.81	+
	Total		31.08	7.88			30.71	7.44	
	Grand Mean		3.88	0.99			3.84	0.93	

+ = Agreed, - = Disagree.

Table 5 was on the strategies can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state. The respondents agreed on all the 7 items that utilisation of emerging global best practices in teaching, adoption of model to promote innovations, utilisation of

computer based learning in health education , utilisation of computer based test in testing students inhealth education, health educators should read professional journals in general education, conscious plan for the creation of high quality innovators, innovation in school curriculum and In-service training for health educators arethe strategies can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state.

Utilising the information in table 5 and the mean rating from all the 8 items, the subsequent were noted. The sample for male health educators was 55 with mean rating of 3.88 and standard deviation of 0.99 while the sample for female health educators was 16 with mean rating of 3.84 and standard deviation of 0.93.

Utilising the significant level of acceptancefor the investigation of 2.50, the ratings of male and female health educators were higher than the criterion level of acceptance. This means that strategies that can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state werehigh as the ratings were high.

Hypothesis 1: There is no significant difference between male and female health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.

**Table 6: z test of Significant Difference between Male and Female Health Educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.**

States	N	X	SD	Df	Level of Significance	Calculate d z-Value	Critical z-Value	Decisions
Male Health Educators	55	32.75	6.60	69	0.05	-1.53	1.96	Note Signif Accept Ho1
FemaleHealth Educators	16	33.45	14.7	5				

Significant at  $0.05 < P$  level

Table 6 signified that calculated z value of -1.53 was lesser than the critical z value of 1.96. Consequently, the null hypothesis was acknowledged. This means that there was no significant difference between male and female health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.

Hypothesis 2; There is no significant difference between experienced and inexperienced health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.

**Table 7: z test of Significant Difference between Experienced and Inexperienced health educators in their he utilisation of innovation in their Job Performance in Federal and State Owned Colleges of Education in Delta state.**

States	N	X	SD	Df	Level of Significance	Calculate d z-Value	Critical z-Value	Decisions
Experienced Health Educators	47	34.33	25.10	69	0.05	-0.42	1.96	Not Signif Accept Ho <sup>2</sup>
InExperienced Health Educators	13	34.63	25.20					

Significant at  $0.05 < P$  level

Table 7 indicated that calculated z value of -0.42 was lesser than the critical z value of 1.96. Consequently, the null hypothesis was approved. This implies that there was no significant no significant difference between experienced and inexperienced health educators in their he utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.

Findings:

1The forms of teaching approaches in health education that requires innovations in public colleges of education in Delta state were high as the ratings were high. 2The forms of innovation needed by health educators in their job performance in federal and state owned colleges of education in Delta state were high as the ratings were high.

3The factors responsible for utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state were high as the ratings were high .

4The consequences of non utilisation of innovation have among health educators in theirjob performance in federal and state owned colleges of education in Delta state werehigh as the ratings were high

5The strategies can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state werehigh as the ratings were high.

6There was no significant difference between male and female health educators in their 4utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.

7There was no significant no significant difference between experienced and inexperienced health educators in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.

Conclusion: From the findings, it was concluded that:

- 1 The forms of teaching approaches in health education that requires innovations in public colleges of education in Delta state were high.
- 2 The forms of innovation needed by health educators in their job performance in federal and state owned colleges of education in Delta state were high
- 3 The factors responsible for utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state were high.
- 4 The consequences of non utilisation of innovation have among health educators in their job performance in federal and state owned colleges of education in Delta state were high
- 5 The strategies can be employed to encourage the utilisation of innovation among health educators in their job performance in federal and state owned colleges of education in Delta state were high.
- 6 Male and female health educators do not differ significantly in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.
- 7 Experienced and inexperienced health educators do not differ significantly in their utilisation of innovation in their job performance in federal and state owned colleges of education in Delta state.

**Recommendations:** The following recommendations were made:

- 1 Delta state government should provide the required resources in the teaching of health education in the colleges of education to rebuild a free, all-inclusive and quality education scheme as education is internationally considered as a tool per excellence for social and monetary reform.
- 2 The colleges of education in Delta state should connect in the campaign for an innovative revolution in education.
- 3 Colleges of education administrators should preserve health educators by improving job circumstances.
- 4 Global initiatives should be put in place in the Colleges of education for rapid transformation of health education.
- 5 Health education programme in the colleges of education should be holistic with emphasis on staff development, innovation, academic improvement, principles, collective progression and scholarship.

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