



(RESEARCH ARTICLE)



## Students' Accessibility of Information Communication Technology Resources and Management of Teenage Pregnancy in Public Schools in Trans-Nzoia County, Kenya

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### Abstract

The purpose of this study was to determine the influence of the students' accessibility of information communication technology (ICT) resources on management of teenage pregnancy in public day secondary schools in Trans- Nzoia County. The ex post facto research design was used. The target population was 233 Principals, 2462 teachers and 1890 student leaders from public day secondary schools. Purposive sampling was used to select 23 Principals from the five sub counties while simple random sampling procedure was used to select 246 teachers and 189 students for the study. Data was collected using questionnaires and focused group discussion. Data analysis was done using percentages, means, standard deviations, Pearson's correlation coefficient and regression analysis. The results of this study showed that ICT resources and personnel, when available and properly utilized, play a significant role in supporting teenage pregnancy prevention and management efforts within schools. The study found out that management of teenage pregnancy are affected strongly by availability of ICT resources as well as its accessibility.

**Keywords:** Accessibility; Management; Student; Resources; Teenage Pregnancy

### 1. Introduction

Access to computers and other ICT infrastructure is one of the critical barriers to ICT integration in schools (Keiyoro, 2010). However, many schools in Kenya now have computers, and these are more likely to be found in the principal's office (Wakhu, 2013). The geographical set up and socio-economic status of an institution determines accessibility to ICT equipment. The success of ICT integration in schools is dependent upon hardware and software availability and accessibility to users.

Despite great improvement in telecommunication infrastructure in Kenya, Internet connectivity was limited to few schools in urban areas yet majority of registered schools were located in semi urban and rural settings. Accessibility to ICT infrastructure was mostly limited by poor ICT network coverage especially in rural areas (Swarts & Wachira, 2010). Poor connectivity to government ICT infrastructure influenced availability and accessibility as well. Teachers' accessibility to ICT as a determinant for integration in management at various levels is subject to discussion. Kiptalam and Rodrigues's (2010) study established that 98% of teachers accessed computers, 82.7% Internet, 73.5% computer in labs, 29.6% in principals' office, 12.2% in library and 25.5% in their lounge and offices. The level of access to ICTs was guided by availability which was not an issue.

Makhanu and Kamper (2012) posit that 63.3% of secondary schools had electricity, 36.7% did not, 55.3% accessed computers as opposed to 44.7%, majority 84% had access to Internet/ email against 16% that never had, 8.5% accessed video/digital cameras while 100% had no access to surveillance cameras. These findings unveil the wide digital divide in principals' access to ICT infrastructure. Kiptalam and Rodrigues's (2010) study was on Internet utilization in both

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urban and rural schools with Internet connectivity and teachers formed the sample size while Makhanu and Kamper (2012) study was on the relationship between principals' access to ICT and school performance.

## 2. Material and Methods

The study used an ex post facto research design, which is suitable for exploring relationships between variables that cannot be manipulated. It was appropriate for this study as it helped examine the relationship between the use of ICT resources and perceptions among school stakeholders, alongside the reported cases of teenage pregnancy in schools. The research was conducted in Trans Nzoia County, located in the Rift Valley region of Kenya. The county is agriculturally rich and financially stable, with a significant middle-class population and high access to financial and educational services. It was selected due to increasing cases of teenage pregnancies between 2020 and 2023. The study population included 233 school principals, 2,462 class teachers, and 1,890 student leaders from 233 public day secondary schools in the county. These individuals were considered literate and numerate, capable of effectively participating in the study. The target population was drawn from the same group, with a focus on student leaders in Forms 3 and 4 who were more adapted to school environments, and teachers from the selected schools. These schools were purposively targeted due to their vulnerability to teenage pregnancies. The sampling method used was probability sampling, specifically stratified and simple random sampling, to ensure a fair and representative selection from all five sub-counties in Trans Nzoia. Stratification was based on schools and sub-counties to ensure proportional representation. Following Mugenda & Mugenda's (2003) guideline, 10% of each category was sampled: 23 principals, 246 teachers, and 189 student leaders, giving a total sample size of 458 respondents from a population of 4,895

## 3. Results and Discussion

### 3.1 Students' accessibility of ICT resources on management of teenage pregnancy

The objective of the study was to determine the influence of the students' accessibility of ICT resources on management of teenage pregnancy in public day secondary schools in Trans--Nzoia County. The study sought to determine the influence of the students' accessibility of ICT resources on management of teenage pregnancy in public day secondary schools in Trans- Nzoia County. In this section, the study sought the views of the teacher and students through questionnaires on students' accessibility of ICT resources.

### 3.2 Teachers response on students' accessibility of ICT resources

**Table 1** Teachers response on students' accessibility of ICT resources

Statement	SA	A	NS	D	SD	Mean	Std.
The use of ICTs in school has improved students understanding of teenage Pregnancy and reproductive health	38	46	29	43	17	2.74	.632
	21.97%	26.59%	16.76%	24.86%	9.83%		
The use of ICTs in school has improved students ability to prevent early pregnancy	65	51	19	23	15	2.26	.325
	37.57%	29.48%	10.98%	13.29%	8.67%		
The use of ICTs in school has improved students ability to communicate and educate others on teenage pregnancy	48	57	22	27	19	2.49	.537
	27.75%	32.95%	12.72%	15.61%	10.98%		
The spread of inaccurate or harmful information online can negatively impact adolescents' decision-making.	29	95	24	24	1	2.27	.854
	16.76%	54.91%	13.87%	13.87%	0.58%		
Online platforms and educational games was used to deliver targeted interventions that address knowledge gaps and promote positive behaviors	10	34	19	45	65	3.70	.685
	5.78%	19.65%	10.98%	26.01%	37.57%		

Key: SA =strongly agree, 2=agree 3=Not sure, 4= Disagree, 5=Strongly Disagree

The teachers were requested to rate their views on students' accessibility of ICT resources. The views were rated on a scale of 1 to 5: where SA =strongly agree, 2=agree 3=Not sure, 4= Disagree, 5=Strongly Disagree. The average mean score is 3.0. The findings are presented in Table 1.

Table 1 shows that the teachers (48.56%) agreed that the use of ICTs in school has improved students understanding of teenage Pregnancy and reproductive health. 38 (21.97 %) teachers strongly agreed and 46 (26.59 %) teachers agreed. the teachers indicated that use ICTs in school will likely improve students understanding of teenage Pregnancy and reproductive health in public day secondary schools in Trans--Nzoia county, Kenya.

More than half of the teachers (67.05%) agreed that the use of ICTs in school has improved students' ability to prevent early pregnancy. 65 (37.57 %) teachers strongly agreed and 51 (29.48 %) teachers agreed. The teachers noted that use ICTs in school will likely improve student's ability to prevent early pregnancy.

A majority of the teachers (60.70 %) agreed that the use of ICTs in school has improved students ability to communicate and educate others on teenage pregnancy. 48 (27.75 %) teachers strongly agreed and 57 (32.95 %) teachers agreed. The teachers noted that use ICTs in school will likely improve students' ability to communicate and educate others on teenage pregnancy.

About three quarters of the teachers (70.67 %) agreed that the spread of inaccurate or harmful information online can negatively impact adolescents' decision-making. 29 (16.76 %) teachers strongly agreed and 95 (54.91 %) teachers agreed. The teachers noted that use ICTs in school will likely promote the spread of inaccurate or harmful information online can negatively impact adolescents' decision-making.

A majority of the teachers (63.56 %) disagreed that online platforms and educational games can be used to deliver targeted interventions that address knowledge gaps and promote positive behaviors. 65 (37.57 %) teachers strongly disagreed and 45 (26.01 %) teachers disagreed. The teachers noted that use of online platforms and educational games would not deliver targeted interventions that address knowledge gaps and promote positive behaviors.

### 3.3 Students response on students' accessibility of ICT resources

The Students were requested to rate their views on students' accessibility of ICT resources. The views were rated on a scale of 1 to 5: where SA =strongly agree, 2=agree 3=Not sure, 4= Disagree, 5=Strongly Disagree. The average mean score is 3.0. The findings are presented in Table 2.

**Table 2** Students response on students' accessibility of ICT resources

Statement	SA	A	NS	D	SD	Mean	Std.
The use of ICTs in school has improved students understanding of teenage Pregnancy and reproductive health	36	48	34	12	13	2.43	.965
	25.17%	33.57%	23.78%	8.39%	9.09%		
The use of ICTs in school has improved students ability to prevent early pregnancy	47	61	23	12	0	2.00	.654
	32.87%	42.66%	16.08%	8.39%	0.00%		
The use of ICTs in school has improved students ability to communicate and educate others on teenage pregnancy	28	47	27	18	23	2.73	.956
	19.58%	32.87%	18.88%	12.59%	16.08%		
The spread of inaccurate or harmful information online can negatively impact adolescents' decision-making.	59	54	16	14	0	1.90	.773
	41.26%	37.76%	11.19%	9.79%	0.00%		
Online platforms and educational games was used to deliver targeted interventions that address knowledge gaps and promote positive behaviors	46	36	23	24	14	2.47	.862
	32.17%	25.17%	16.08%	16.78%	9.79%		

Key: SA =strongly agree, 2=agree 3=Not sure, 4= Disagree, 5=Strongly Disagree

Table 2 shows that the students (58.74%) agreed that the use of ICTs in school has improved students understanding of teenage Pregnancy and reproductive health. 36 (25.17 %) students strongly agreed and 48 (33.57 %) students

agreed. The students indicated that use ICTs in school will likely improve students understanding of teenage Pregnancy and reproductive health in public day secondary schools in TransNzoia County.

Three quarters of the students (67.05%) agreed that the use of ICTs in school has improved students ability to prevent early pregnancy. 47 (32.87 %) students strongly agreed and 61 (42.66 %) students agreed. The students recorded that use of ICTs in school will likely improve students ability to prevent early pregnancy in public day secondary schools in Trans-Nzoia County.

A majority of the students (52.45 %) agreed that the use of ICTs in school has improved students ability to communicate and educate others on teenage pregnancy. 28 (19.58 %) students strongly agreed and 47 (32.87 %) students agreed. The students noted that use ICTs in school will likely improve students' ability to communicate and educate others on teenage pregnancy.

More than three quarters of the students (79.02 %) agreed that the spread of inaccurate or harmful information online can negatively impact adolescents' decision-making. 59 (41.26 %) students strongly agreed and 54 (37.76 %) students agreed. The students noted that use ICTs in school will likely promote the spread of inaccurate or harmful information online can negatively impact adolescents' decision-making.

A majority of the students (57.34 %) agreed that online platforms and educational games can be used to deliver targeted interventions that address knowledge gaps and promote positive behaviors. 46 (32.17 %) students strongly agreed and 36 (25.17 %) students agreed. The students recorded that use online platforms and educational games would likely deliver targeted interventions that address knowledge gaps and promote positive behaviors.

### 3.4 Descriptive statistics of students' accessibility of ICT resources

Further analysis was done by summing up the mean indices and standard deviations on the responses of students' accessibility of ICT resources to compute a summated mean index as a measure of the extent of management of teenage pregnancy. The study used the following mean scale: 1.0-1.8 = Strongly agree; 1.9-2.6 = Disagree; 2.7-3.4 = Not sure; 3.5-4.2 =Disagree; 4.3-5.0 = Strongly Disagree, with an average mean index was 3.0.

The study also analyzed data from teachers and students using t-test. The independent sample t-test compares the means between unrelated groups on the same continuous dependent variable. This was used to analyses whether the mean responses of the teachers and students were statistically different.

The transformed values were later used in carrying out more parametric tests. The resultant descriptive statistics were summarized in Table 3 below.

**Table 3** Descriptive statistics of students' accessibility of ICT resources

students' accessibility of ICT resources (n = 316)	Teachers response		students response		Average mean	Average SD	Mean difference	Std error difference	t	Sig. (2-tailed)
	Mean	SD	Mean	SD						
The use of ICTs in school has improved students understanding of teenage Pregnancy and reproductive health	2.74	0.632	2.43	0.965	2.585	0.799	0.31	-0.333	8.325	0.086
The use of ICTs in school has improved students ability to	2.26	0.325	2.00	0.654	2.130	0.490	0.26	-0.329	-2.562	0.325

prevent early pregnancy										
The use of ICTs in school has improved students ability to communicate and educate others on teenage pregnancy	2.49	0.537	2.73	.956	2.610	0.747	-0.24	-0.419	9.568	0.245
The spread of inaccurate or harmful information online can negatively impact adolescents' decision-making.	2.27	0.854	1.90	0.773	2.085	0.814	0.37	0.081	7.685	0.865
Online platforms and educational games was used to deliver targeted interventions that address knowledge gaps and promote positive behaviors	3.70	0.685	2.47	0.862	3.085	0.774	1.23	-0.177	0.325	0.000**
Composite values	2.69 2	0.606	2.306	0.842	2.499	0.724	0.39	-0.235	1.829	0.188

\*\* Significant at the 0.05 level (2-tailed)

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The findings presented in table 3 indicate that students in public day secondary schools in Trans-Nzoia County generally have access to ICT resources, with a weighted mean of 2.499 (SD = 0.724), which is below the neutral midpoint of 3.0. This suggests that, if properly utilized, these resources can effectively support the management of teenage pregnancy and enhance reproductive health education.

Overall, respondents agreed (mean = 2.855, SD = 0.799) that the use of ICTs in schools has improved students' understanding of teenage pregnancy and reproductive health. Teachers' mean response was 2.74 (SD = 0.632), while students' mean was 2.43 (SD = 0.965). An independent t-test showed no significant difference between the groups ( $t = 8.325$ ,  $p = 0.086$ ), indicating similar perceptions among teachers and students.

Similarly, respondents agreed (mean = 2.130, SD = 0.490) that ICT use in schools has enhanced students' ability to prevent early pregnancy, with teachers reporting a mean of 2.26 (SD = 0.325) and students 2.00 (SD = 0.654). Again, the difference was not statistically significant ( $t = -2.562$ ,  $p = 0.325$ ).

The ability of students to communicate and educate others about teenage pregnancy was also perceived to have improved through ICT use (mean = 2.610, SD = 0.747). Teachers' mean was 2.49 (SD = 0.537) and students' was 2.73 (SD = 0.956), with no significant difference between groups ( $t = 9.568$ ,  $p = 0.245$ ).

Most respondents (mean = 2.085, SD = 0.814) agreed that the spread of inaccurate or harmful information online can negatively impact adolescents' decision-making. Teachers had a mean of 2.27 (SD = 0.854), students 1.90 (SD = 0.773), with no significant difference in perception ( $t = 7.685, p = 0.865$ ).

However, respondents generally disagreed (mean = 3.085, SD = 0.774) that online platforms and educational games can be used to deliver targeted interventions addressing knowledge gaps and promoting positive behaviors. Teachers disagreed more strongly (mean = 3.70, SD = 0.685) compared to students (mean = 2.47, SD = 0.862), and this difference was statistically significant ( $t = 0.325, p < 0.0001$ ).

Further analysis showed that four out of five response categories between teachers and students were statistically similar ( $t = 1.829, p = 0.188$ ), indicating overall alignment in their views regarding students' accessibility of ICT resources.

The findings of this study highlight several areas where improvements can be made to enhance the use of ICT resources in managing teenage pregnancy in public day secondary schools in Trans-Nzoia County. First, there is a clear need to improve the ICT infrastructure within schools, particularly by establishing well-equipped computer rooms. This would provide students with more direct and reliable access to digital learning materials, which is currently limited.

Given that students widely have access to digital devices such as mobile phones, tablets, radios, and televisions both at home and school, it is important to leverage these platforms to deliver reproductive health education. Educational content designed for these devices such as mobile applications, radio programs, and educational TV shows can effectively reach and engage students on topics related to teenage pregnancy and sexual health.

However, the concern over the spread of inaccurate or harmful information online underscores the necessity for schools and education authorities to develop and promote reliable, age-appropriate digital content. This can include targeted online platforms and educational games designed to close knowledge gaps and encourage positive behavior among adolescents.

Furthermore, training and capacity-building for both teachers and students on how to effectively use ICT tools for sexual and reproductive health education is essential. Such initiatives would empower users to confidently access, interpret, and disseminate accurate information.

Encouraging collaboration between teachers and students in the use of ICT for reproductive health awareness can also enhance learning outcomes. Peer-led projects and interactive ICT activities may foster a supportive environment that motivates students to communicate and educate their peers about teenage pregnancy.

### 3.5 Correlation between Students' accessibility of ICT resources and management of teenage pregnancy

In order to establish the relationship between Correlation between students' accessibility of ICT resources and management of teenage pregnancy, *Pearson* correlation analysis was used to find out if there existed a relationship. A correlation is a number between -1 and +1 that measures the degree of relationship between two variables. The correlation coefficient value ( $r$ ) that ranges from 0.10 to 0.29 would be considered weak, from 0.30 to 0.49 would be considered medium and from 0.50 to 1.0 would be considered strong. Therefore a positive value for the correlation would imply a positive relationship and a negative value for the correlation would imply an inverse or negative association. The study findings are shown on table 4.

**Table 4** Pearson correlation of Students' accessibility of ICT resources and management of teenage pregnancy

		Pearson's Correlation	1	2	3	4	5	6
1	Management of teenage pregnancy	Correlation	1					
		Sig.						
2	The use of ICTs in school has improved students understanding of teenage Pregnancy and reproductive health	Correlation	0.524**	1				
		Sig.	0.000					
3		Correlation	0.395**	0.386**	1			

	The use of ICTs in school has improved students ability to prevent early pregnancy	Sig.	0.035	0.037				
4	The use of ICTs in school has improved students ability to communicate and educate others on teenage pregnancy	Correlation	0.421**	0.345**	0.431**	1		
		Sig.	0.000	0.043	0.624			
5	The spread of inaccurate or harmful information online can negatively impact adolescents' decision-making.	Correlation	-0.558**	-0.347**	-0.334**	-0.389**	1	
		Sig.	0.034	0.043	0.039	0.043		
6	Online platforms and educational games was used to deliver targeted interventions that address knowledge gaps and promote positive behaviors	Correlation	0.124	0.114	0.035	0.021	0.458**	1
		Sig.	0.235	0.625	0.041	0.952	0.035	

\*\* . Correlation is significant at the 0.05 level (2-tailed); **Source:** Author 2025

Based on this correlation matrix in table 4, there exists a correlation students' accessibility of ICT resources and management of teenage pregnancy. The correlations were between -0.558 to 0.524. Four out of the five factors of accessibility of ICT resources correlated with management of teenage pregnancy in public day secondary schools. The study therefore rejected the null hypothesis

**HO:** There is no statistically significant influence of the availability of ICT resources on management of teenage pregnancy in public day secondary schools in Trans- Nzoia County, Kenya

Indeed students' accessibility of ICT resources correlated with management of teenage pregnancy in public day secondary schools in TransNzoia County, Kenya. Therefore, management of teenage pregnancy in public day secondary schools was likely affected by accessibility of ICT resources.

The Pearson correlation index obtained on the variable "*The use of ICTs in school has improved students understanding of teenage Pregnancy and reproductive health*" was  $r = 0.524$ , it is moderately positive correlation with  $\rho < 0.0001$  which is less than  $\alpha = 0.05$  which means that The use of ICTs in school has improved students understanding of teenage Pregnancy and reproductive health would likely positively affect management of teenage pregnancy in public day secondary schools

The variable "*The use of ICTs in school has improved students ability to prevent early pregnancy*" weakly correlate with management of teenage pregnancy in public day secondary schools. ( $r = 0.395$ ,  $\rho = 0.35$ ) at  $\alpha = 0.05$ ). The variable "*The use of ICTs in school has improved students ability to communicate and educate others on teenage pregnancy*" also moderately correlate with management of teenage pregnancy in public day secondary schools. ( $r = 0.427$ ,  $\rho = \rho < 0.0001$ ) at  $\alpha = 0.05$ )).

The variable "*The spread of inaccurate or harmful information online can negatively impact adolescents' decision-making*" also moderately negatively correlated with management of teenage pregnancy in public day secondary schools. ( $r = -0.558$ ,  $\rho = 0.034$ ) at  $\alpha = 0.05$ )).

The correlation between the variable "*Online platforms and educational games was used to deliver targeted interventions that address knowledge gaps and promote positive behaviors*" and management of teenage pregnancy was not statistically significant i.e. ( $r = -0.124$ ,  $\rho = 0.235$ ) at  $\alpha = 0.05$ ) and therefore was not used for further analysis

### 3.6 Regression analysis between Students' accessibility of ICT resources and management of teenage pregnancy (model formulation)

The aim of this section was to determine the influence of the students' accessibility of ICT resources on management of teenage pregnancy in public day secondary schools in Trans- Nzoia County. This study carried out the diagnostic tests to ensure that the assumptions of regression model are met and proceeded to formulate a simple linear regression to help in establishing the statistical effect of students' accessibility of ICT resources on management of teenage pregnancy in public day secondary schools in Trans- Nzoia County. The model was of the form:  $Y = \beta_0 + \beta_1 X_1 + \epsilon$ . Management of teenage pregnancy in public day secondary schools index ( $Y$ ) was computed from the items. Where:

y = management of teenage pregnancy  
 x = students' accessibility of ICT resources

Tables 5, 6, and 7 showed the information from the analysis.

**Table 5** The Regression Model Summary for effects of Students' accessibility of ICT resources and management of teenage pregnancy

Model Summary					
Model	R	R- Square	Adjusted R- Square	Std. Error of the Estimate	p-value
1	0.496 <sup>a</sup>	0.423	0.396	0.2345	0.000
a. Predictors: (Constant), Students' accessibility of ICT resources					
b. Dependent Variable: management of teenage pregnancy					

Table 5 shows the value in R, ( $r = .496$ ), indicating there was a medium positive relationship between the two variables Students' accessibility of ICT resources and management of teenage pregnancy. The coefficient of determination indicated R-Square, ( $R^2 = .396$ ), reveals the amount of variability in management of teenage pregnancy that can be explained by the variable students' accessibility of ICT resources. In this case, the value of adjusted R square reveals that 39.6 % variability in management of teenage pregnancy can be explained by Students' accessibility of ICT resources. The analysis indicates that 60.4 % unexplained variation can be attributed to other factors not included in this model.

Further Table 6 presents the ANOVA results.

**Table 6** ANOVA Test for the effects of Students' accessibility of ICT resources and management of teenage pregnancy

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	124.325	1	59.324	48.325	.000 <sup>a</sup>
	Residual	234.213	314	9.236		
	Total	358.538	315			

a. Predictors: (Constant), Students' accessibility of ICT resources  
 b. Dependent Variable: management of teenage pregnancy

Table 6 discloses whether or not the model is a significant predictor of management of teenage pregnancy. The analysis in Table 6 shows ANOVA results of  $F=48.325$  with 1 and 315 degrees of freedom and F being significant at  $p<.05$ . Given this result, it can be presumed that the regression model significantly predicts the extent to which students' accessibility of ICT resources affect management of teenage pregnancy. The regression equation established from this output may be stated as  $F(1,315) = 48.325$   $p<.0001$ ). Furthermore, Regression Coefficient (Table 7) reveals how (students' accessibility of ICT resources) the predictor variable contribute to the model.

**Table 7** Regression Coefficient for the effects of students' accessibility of ICT resources on management of teenage pregnancy

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	2.035	0.685		19.396	0.000
	Teacher modeling	0.325	0.124	0.298	3.625	0.000

a. Predictors: (Constant), Students' accessibility of ICT resources

b. Dependent Variable: management of teenage pregnancy

Table 7 shows the results of the regression coefficient analysis. It is the equation that provides information about the change in the value of the dependent variable (*management of teenage pregnancy*) corresponding to one unit change in the independent variable (students' accessibility of ICT resources). The data in Table 7 indicates the model;

$$Y (\text{management of teenage pregnancy}) = 2.035 + 0.325 X_1 + \varepsilon$$

Where  $X_1$  = Students' accessibility of ICT resources, where Y is the estimated value of the dependent variable, and X is the value of the independent variable. Based on the results, the regression coefficient reveals that an increase of 1 unit in the effects of students' accessibility of ICT resources leads to an increase management of teenage pregnancy by 0.325 units.

The findings in Table 7 tallies with the findings from online focus group discussion (FGD) with Principals. The principals highlighted that student access to computers and the internet in the school's ICT lab has led to noticeable positive changes.

*"Student are now accessing computers and internet in the school's ICT lab, we have noticed a change. They could now watch educational videos about reproductive health, take part in virtual peer discussions, and even reach out to the school nurse anonymously through emails or online forms. This kind of access has empowered them with information and privacy, which is helping reduce pregnancy cases. It's not perfect yet, but ICT has opened a new channel for support that wasn't there before.*

These findings in Table 7 and the interview data concurs with a report by UNESCO (2021) which acknowledged that digital literacy and access among students are critical in promoting effective sexuality education and breaking cultural taboos around reproductive health discussions. The report further, illustrates that when students are empowered with digital resources, they are more likely to engage in preventive behaviors and seek timely support factors essential in the management of teenage pregnancy.

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#### 4. Conclusion

This study concludes that students' accessibility to ICT resources significantly enhances their knowledge and awareness of reproductive health issues. However, disparities in access especially for students from low-income backgrounds limited the full potential of ICT integration.

##### *Recommendation*

The study recommended that school administrations should develop inclusive ICT strategies that allow all students, regardless of their socio-economic background, to access digital resources. This may involve creating ICT hubs, subsidizing data access, or using mobile-friendly platforms to deliver reproductive health content. Schools should be encouraged to form partnerships with NGOs or digital health providers for technical support.

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#### Compliance with ethical standards

##### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

##### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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