



## Determining institutionally related factors affecting online teaching and learning among student nurses and midwives at Mildmay Uganda School of Nursing and Midwifery, Wakiso district. A cross-sectional study.

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### Abstract

#### Background

Across developing countries, frequent power outages and unstable electricity supply disrupted synchronous learning and reduced overall participation in online classes. The study aims to determine institutionally related factors affecting online teaching and learning among student nurses and midwives at Mildmay Uganda School of Nursing and Midwifery.

#### Methodology

A descriptive cross-sectional study using quantitative methods was conducted. The population consisted of 200 student nurses and midwives, with a sample size of 133 determined using Slovin's formula. Stratified random sampling ensured fair representation from six class levels. Data was collected using structured and semi-structured questionnaires, checked for completeness, coded, and analysed with SPSS version 22 and Microsoft Excel. Results were presented as frequencies, percentages, tables, and charts.

#### Results

The majority, 79 (59.4%) of the respondents were females, while the minority, 54 (40.6%) were males. The majority (56.4%) of the respondents mentioned that the institution rarely supported them. Most respondents 68, 51.1%) stated that digital resources provided by their institution were not sufficient at all. Regarding formal training, the majority, 123 (92.5%) of the respondents stated that their institution did not provide training for online teaching. Most respondents 46, 34.6%) reported that unstable access to institutional online platforms was a challenge, while the least 20, 15%) mentioned limited interaction with lecturers and administrative staff. The majority of 100 (75.2%) of the respondents confirmed that their institution had a system for monitoring and evaluating online teaching effectiveness.

#### Conclusion

Lack of support, insufficient digital resources, and inadequate training were the significant institutional factors that affected online teaching and learning among student nurses and midwives.

#### Recommendations

Institutions should provide technical support, reliable internet, and digital resources, and organise training for students on online platforms.

**Keywords:** *Institutionally related factors, Online teaching and learning, Student nurses and midwives, Mildmay Uganda School of Nursing and Midwifery.*

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#### Background

In the United States, poor Learning management System usability hindered instructors' ability to manage content effectively and decreased student satisfaction, and inadequate institutional support was identified as one of the weakest predictors of their readiness, suggesting the need for more robust support from their institutions (Aldabbas et al.,

2025). Collaboration among departmental heads is key to learning. In Indonesia, insufficient collaboration among departments hindered online teaching and learning (Suryanti et al., 2025). In Pakistan, limited management commitment, weak leadership, and inadequate institutional strategy contributed to poor adoption and perceived quality of online teaching. Limited and a lack of skilled IT support staff



hindered students and instructors from resolving technical difficulties promptly (Ajmal et al., 2024). Digital equipment is a resource for online learning. Across developing countries, frequent power outages and unstable electricity supply disrupted synchronous learning and reduced overall participation in online classes. Many institutions were inadequately prepared for digital transformation, reflected in low readiness scores (Ndibalema, 2022). In public universities, delayed announcements, unclear administrative messages, and weak communication structures reduced students' attendance and motivation in online programs. For effective communication, there must be pre-made organizations from the administrators (Despititari et al., 2025). In Uganda, unreliable internet infrastructure significantly reduced engagement and continuity in online classes (Eton et al., 2022). The study aims to determine institutionally related factors affecting online teaching and learning among student nurses and midwives at Mildmay Uganda School of Nursing and Midwifery.

## Methodology

### Study design

The study adopted a descriptive and analytical cross-sectional design. It employed quantitative methods of data collection because they enabled the researcher to obtain the necessary information required to answer the study's objectives. It revealed the potential relationship of variables, thus setting the stage for detailed investigation, and it described with more accuracy the characteristics of a given phenomenon under study. As it was cross-sectional, it was carried out within a short period of time, and participants were interviewed at a single occasion without follow-up.

### Study setting

The study is conducted at Mildmay Uganda School of Nursing and Midwifery, with about 200 students, situated at 12 km on Entebbe Road, Naziba Hill, Lweza, Kampala, Uganda. The school is recognised for its integrated healthcare, training, and research services. The study area is chosen because it serves a large catchment area, hence a big population of clients can be sampled from. It is accessible to the researcher since the researcher stays near the study area. This minimises the cost of transport during data collection.

### Study population

The population of interest was all the student nurses and midwives at the School of Nursing and Midwifery, who were willing to consent and participate in the study.

### Sampling size determination

The population of interest was 200. The sample size will then be calculated using Slovin's formula to get sample size.

$$n = \frac{N}{1 + Ne^2}$$

where  $n$  = sample size

and  $N$  = population of interest = 200 (students)

$e$  = level of precision (maximum allowed error at 95% confidence interval in estimating the population size) = 5% = 0.05

Substituting the formula

$$n = \frac{200}{1 + 200 \times 0.05^2}$$

$n$  is approximately 133.3

therefore  $n = 133$

Therefore, the sample size was 133 respondents.

The sample size was selected because it was adequate enough to generate the information needed for the study, it was relatively cheap and manageable for the researcher in terms of time and finances.

### Sampling procedure

The study used a stratified random sampling method to ensure fair representation of students from different classes. The total population of 133 students was divided into six strata according to class level (S1–S6), and then 4 students were sampled from each stratum. Data collection took place over 6 days, during which each class contributed a specific number of respondents daily until the required total was reached. For each class, the researcher used simple random sampling to select the required number of participants. The study collected data for 6 days, and on each day, small pieces of paper of the same colour were cut to the same size. 11 pieces of paper were labelled “yes” and 11 labelled “no”. The pieces of paper were folded, then put in a box, mixed well, and respondents were invited to pick one piece of paper at a time from the box on each day. Respondents who selected “yes” participated in the study until the required sample size of 133 respondents was reached from all classes.

### Inclusion criteria

The study included all Nursing and Midwifery students, nurses and midwives, aged 18- 25 years, male and female students who agreed to consent and were available during the period of data collection.

### Exclusion criteria

The study excluded those who were not present at the study area during the time of data collection and those who declined consent.



### Dependent variable.

This was online learning and teaching.

### Independent variable

These were institutional challenges and individual challenges affecting online learning and teaching.

### Research instrument and rationale

The study employed structured and semi-structured questionnaires with closed-ended questions designed in English. This was used because the information needed was easily described in writing, and the study being sensitive, privacy was ensured with this method. The study pretested the questionnaire on about 5% of the sample size outside the study area for the validity and reliability of the questionnaire. This enabled the removal of inappropriate or poorly worded, unclear, embarrassing, and illogical questions. The piloting of the questionnaire was conducted before the actual study began.

### Data collection procedure

After writing the proposal and it was approved by the supervisor, the study obtained an introductory letter from the school research committee, which was presented to the school principal to allow her to conduct the study. The principal then introduced her to the academic registrar, who in turn introduced her to the student nurses and midwives in the school. The study introduced itself and obtained consent from the students available by explaining the purpose of the study, benefits, as well as their voluntary acceptance to participate, observing privacy, confidentiality, and respect for the rights of respondents. Questionnaires were filled in anonymously, and filled questionnaires were kept under lock and key and accessed only by the study. A password to the data was kept secret and only known to the study.

### Data management

The completed questionnaires were checked for completeness, accuracy, and logical flow of responses. Missing responses were filled by making revisits to the

respondents concerned, and data was kept in a safe place for 1 year and stored on a flash disk. Data collected was classified, summarised, and tabulated in the form of frequency and percentages using SPSS.

### Quality and Assurance

#### Validity test

To ensure the validity of the instrument, the supervisor cross-checked the instrument to ensure that content validity was appropriate, and the study instrument was adjusted accordingly.

#### Reliability test

To ensure reliability, the study pilot tested the instrument, standardised administration, and used statistical measures to review inconsistent items to ensure stable and consistent results.

#### Data analysis

Pre-coded quantitative data was entered directly and presented in statistical drawings that were tables and figures (bar graph and pie chart). Qualitative data expressed in narrative form with responses from closed-ended questions were grouped into classes that expressed similar views, which were later coded, entered into the system, and presented in statistical drawings.

#### Ethical considerations

The study obtained an introductory letter from the school before reaching the study area.

Permission was sought at the site where the research was conducted.

The study obtained informed consent from all participants by first explaining the objectives, significance, benefits, and their voluntary acceptance to participate.

The study also allowed those who were not willing to participate in the study to freely withdraw.

Confidentiality, privacy, and respect for the rights of respondents were ensured by allowing the respondents to withhold their names and use codes instead.

## Results

### Socio-demographic data of the respondents

**Table 1 shows the distribution of respondents according to their socio-demographic characteristics (n=133)**

Variable	Responses	Frequency (f)	Percentage (%)
What is your Gender?	Male	54	40.6
	Female	79	59.4

What is your Age	18-25 years	72	54.2
	26-34 years	31	23.2
	35-44 years	30	22.6
What is your Religion	Catholic	67	50.4
	Protestant	20	15.0
	Muslims	33	24.8
	Born again	13	9.8
What is your tribe?	Banyoro	50	37.6
	Baganda	35	26.3
	Luo	14	10.5
	Muyarwanda	34	25.6
Where do you reside?	Rural area	43	32.3
	Urban area	90	67.7
<b>Total</b>		<b>133</b>	<b>100</b>

*Source field findings (2025)*

Table 1 shows that the majority, 79 (59.4%) of the respondents were females, while the minority, 54 (40.6%) were males.

Most respondents, 72 (54.2%), of the respondents were aged 18-25 years, while the least were 30 (22.6%), aged between 35-44 years.

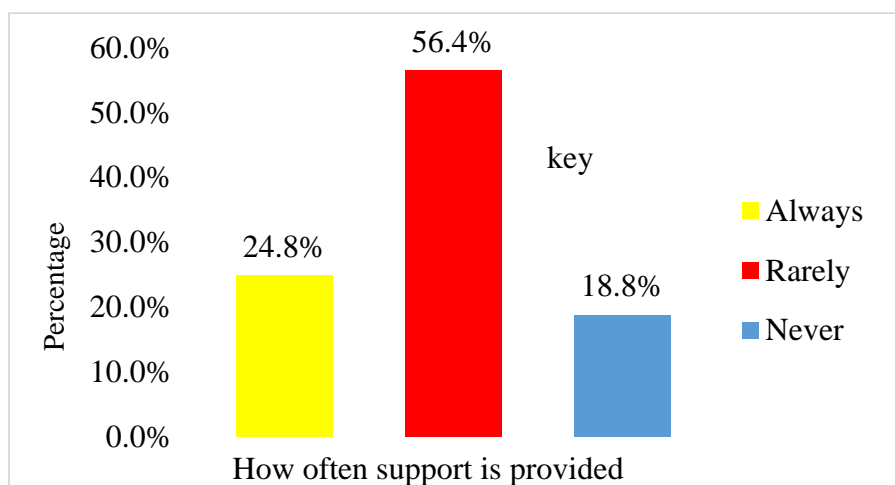
In terms of religion, the majority, 67 (50.4%) of the respondents were Catholics, while the minority, 13 (9.8%) were born again.

Regarding tribe, most respondents, 50 (37.6%), of the respondents were Banyoro, while the fewest, 14 (10.5%), were Luo.

With respect to residence, the majority 90 (67.7%) of the respondents lived in urban areas, while the minority 43 (32.3%) lived in rural areas.

### Institutionally related factors affecting online teaching and learning among student nurses and midwives

**Figure 1 Shows the distribution of respondents according to how often your institution provides IT support for online teaching (n=133)**



*Source field findings (2025)*



Figure 1 shows that the majority (56.4%) of the respondents mentioned that the institution rarely supported them, while the least (18.8%) stated that they were never supported.

**Table 2 shows the distribution of respondents according to their other institutional-related factors affecting online teaching and learning among student nurses and midwives (n=133)**

Variable	Responses	Frequency (f)	Percentage (%)
How sufficient are the digital resources (LMS, e-libraries, online materials) provided by your institution	Moderately sufficient	22	16.6
	Slightly sufficient	43	32.3
	Not sufficient at all	68	51.1
Does your institution provide formal training for online teaching	Yes	10	7.5
	No	123	92.5
Which of the following challenges related to the institution do you face while attending online classes	Unstable or limited access to institutional online platforms.	46	34.6
	Inadequate technical support from the institution.	26	19.6
	Limited interaction with lecturers and administrative staff.	20	15
	Delayed feedback or grading of assignments and exams	41	30.8
Does your institution have a system for monitoring and evaluating online teaching effectiveness	Yes	100	75.2
	No	33	24.8
<b>Total</b>		<b>133</b>	<b>100</b>

*Source field findings (2025)*

Table 2 shows that most respondents (68, 51.1%) stated that digital resources provided by their institution were not sufficient at all, while the fewest (22, 16.6%) stated that they were moderately sufficient.

Regarding formal training, the majority (123, 92.5%) of the respondents stated that their institution did not provide training for online teaching, while 10 (7.5%) indicated that training was provided.

Most respondents (46, 34.6%) reported that unstable access to institutional online platforms was a challenge, while the least (20, 15%) mentioned limited interaction with lecturers and administrative staff.

The majority of 100 (75.2%) of the respondents confirmed that their institution had a system for monitoring and evaluating online teaching effectiveness, while 33 (24.8%) mentioned that they did not have any system.

## Discussion

The study found that the majority (56.4%) of the respondents mentioned that the institution rarely supported them, which affected their online learning, probably because limited technical assistance, inadequate access to learning resources, and insufficient guidance from instructors hindered students' ability to effectively engage with online platforms and complete coursework efficiently. These study findings are in line with a study conducted by Aldabbas et al. (2025), who found that poor institutional support was identified as one of the weakest predictors of their readiness, suggesting the need for more robust support from their institutions.

The study further found that more than half (51.1%) of the respondents mentioned insufficient digital resources as a factor affecting their online studies. The study attributes this to limited access to devices such as laptops and tablets, poor internet connectivity, and inadequate provision of e-learning materials by the institution, which hindered students' ability



to participate fully in online learning activities. The study findings are consistent with a study conducted by Mathrani et al. (2021), who revealed that unequal access to modern computers, e-libraries, and digital learning materials among institutions widened the gap in online learning outcomes.

From the study findings, an overwhelming number (92.5%) of the respondents mentioned that the lack of trained staff in the institution limited them from conducting effective online studies. The study attributes this to the institution's inadequate investment in training personnel to manage digital platforms, which resulted in limited technical guidance, poor troubleshooting support, and insufficient facilitation during online sessions. A similar study was conducted by Mesuwini et al. (2024), who found that limited training for staff on Information Technology affected online learning and teaching. The findings of the study above showed that institution-related factors influenced online teaching and learning among student nurses and midwives.

### Generalizability

The study was conducted at a single institution (MIHS), so findings may not have been generalizable to other nursing and midwifery schools in Uganda or beyond.

### Conclusion

From the study findings, online teaching and learning among student nurses and midwives were affected by institutional factors (lack of support, insufficient digital resources, inadequate training).

### Study limitation

Non-response or refusal to participate: Some students had refused to participate or withdrawn from the study due to fear, lack of interest, or mistrust, which reduced the sample size and could have affected representativeness. Cross-sectional design limitation: Since the study employed a cross-sectional design, it captured data at a single point in time and could not establish causality or observe changes over time.

Self-reported data: Information collected through questionnaires may have been affected by social desirability bias, inaccurate recall, or misunderstanding of questions, which could have impacted data accuracy.

### Recommendation

The school should provide adequate technical support, access to devices, and reliable internet connectivity to facilitate smooth online learning.

The school should organise regular training sessions for students on using online learning platforms and digital tools to enhance participation and academic performance.

### For the Government

Invest in improving digital infrastructure for nursing and midwifery schools, including internet access and provision of e-learning resources.

Develop policies and programs that support capacity building in digital skills for both students and instructors to ensure effective online education.

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List of acronyms

**SPSS:** Statistical Package for Social Scientists

**IT:** Information Technology

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The study was not funded

### Conflict of interest

The author did not declare any conflict of interest

### Data availability

Data is available upon request

### Author contribution

Dorish Leni collected data and drafted the manuscript of the study



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Habert Mpamize supervised the study  
Immaculate Prosperia Naggulu supervised the study

## References

1. Ajmal, F., Kausar, H., & Maqsood, S. (2024). Ensuring Excellence: Quality Assurance Practices of Online Teaching and Learning at Higher Education Level in Pakistan. *Pakistan Journal of Distance and Online Learning*, 10(2), 20-33. <https://doi.org/10.30971/pjdl.v10i2.2636>
2. Aldabbas, H., Elamin, A. M., Ahmed, A. Z., & Gernal, L. (2025, March). Assessing Learning Management System success in the UAE universities: how quality measures are linked to students' academic performance. In *Frontiers in Education* (Vol. 10, p. 1554641). Frontiers Media SA. <https://doi.org/10.3389/educ.2025.1554641>
3. Despitari, N. W. P., & Joni, I. D. A. S. (2025). Online Learning and Effective Communication During The Pandemic. *Jurnal Pustaka Komunikasi*, 8(1), 174-183. <https://doi.org/10.32509/pustakom.v8i1.4725>
4. Eton, M., & Chance, R. (2022). University e-learning methodologies and their financial implications: evidence from Uganda. *Asian Association of Open Universities Journal*, 17(3), 229-241. <https://doi.org/10.1108/AAOUJ-05-2022-0069>
5. Mathrani, A., Sarvesh, T., & Umer, R. (2021). Digital divide framework: online learning in developing countries during the COVID-19 lockdown. *Globalisation, Societies and Education*, 20(5), 625-640. <https://doi.org/10.1080/14767724.2021.1981253>
6. Mesuwini, J., & Mokoena, S. (2024). Exploring Online Teaching and Learning Challenges for the Technical and Vocational Education and Training Lecturer. *Journal of Education and e-Learning Research*, 11(1), 193-202. <https://doi.org/10.20448/jeelr.v11i1.5423>
7. Ndibalema P. (2022). Constraints of transition to online distance learning in Higher Education Institutions during COVID-19 in developing countries: A systematic review. *E-Learning and Digital Media*, 19(6), 595-618. <https://doi.org/10.1177/20427530221107510>
8. Suryanti, N. L. P., Artini, L. P., & Santosa, M. H. (2021). Supporting and hindering factors of online teaching implementation in Universitas Mahasaraswati Denpasar. *Jurnal Pendidikan Bahasa Inggris Indonesia*, 9(1), 45-55. <https://doi.org/10.23887/jpbi.v9i1.212>

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