A survey of virtual instructional competence among tourism teachers in secondary schools, Calabar South local Government Area, Nigeria

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Abstract
This single variable research was carried out to survey virtual instructional competence among tourism teachers in secondary schools in Calabar South Local Government Area, Nigeria. Five research questions and one hypothesis were posed to assess virtual instructional competence variables. Descriptive Survey design was adopted for the study. Stratified Simple random and purposive sampling techniques were used to select sixty (60) tourism teachers in both public and private secondary schools. The instrument for data collection was a well-structured questionnaire. Mean, simple percentage and independent t-test analysis were considered most appropriate for data analysis. The result of the analysis showed that professional competence has the highest status, followed by knowledge of subject matter and interpersonal skills. Male teachers were more competent with virtual instructional competence than their female tourism counterparts. The teachers with 1-5 years teaching experience and those with above 15 years of teaching experience readily embraced virtual competence. One challenge of virtual instruction is that tourism teachers found it difficult to cope with virtual instructional delivery but prefer the traditional face to face interaction. It was recommended that tourism teachers in secondary schools in Calabar South Local Government Area should be encouraged to adapt to the trending issue of virtual instruction delivery.

Keywords Virtual · Instructional competence · Tourism teachers
1 Introduction

Owing to challenges brought about by COVID-19 in recent times, there have been major changes in the world. Education, for example has responded to the rapid changes and teachers are also learning to adapt to changing demands. Virtual instruction is now a common practice in all subject areas. When a course is taught either solely online, or when components of face-to-face instruction are taught online, such as with blackboard and other course management systems, it can be said to be virtual. Virtual instruction includes: digitally transmitted lessons, authorized under varying technologies. Technology education allows comparable instruction in the online environment. This makes it possible for both teachers and learners to stay out of physical contact. The media such as the android phone, computer, television and the radio provide the required linkage.

The Federal Republic of Nigeria (2014), stipulates that “in recognition of the pivotal role of quality teachers in the provision of quality education, teachers must be professionally trained’. This is to ensure professional competence. The policy equally requires that Teachers “must be regularly exposed to new innovations in curriculum especially with the use of information technology (IT). Segun (2011) advocates the need for “Teacher competence in order for effective implementation of the curriculum”. In recent times, teacher competency is not limited to face-to-face but more importantly, the virtual mode of instruction is emphasized too. The big question is, is the Nigerian Teacher ready or competent to deliver virtual instruction?

Most educational institutions in the country teach/learn based on face–to-face traditional methods of learning (Kazeem, 2020). This problem persists even after the COVID-19 forced the government to order schools to switch to virtual modes of learning. The infrastructures have not improved to prepare lecturers and students for uncertainties like the pandemic caused. Neither have teachers and students been trained on virtual competences. Nwachukwu et al. (2021) argued that due to COVID-19, Universities worldwide has embraced digital learning in order to sustain the academic activities. But Universities in Nigeria were under lock and keys in view of poor or lack of digital learning equipment and experts. Ebohon et al. (2021) revealed also that because technology has not been well integrated into the educational systems, Teachers and students faced challenges in adapting to online classes and migrating to remote learning within a short period of COVID-19 emergence and closure of schools.

The Global Campaign for Education (GCE) (2020) reported that “Since its outbreak, COVID-19 has wreaked havoc across the world and like any critical sector, education has been hit hard. Students, schools, colleges and universities have been deeply impacted”. Adelakun (2020) observed that as a control measure against the spread of COVID-19, on March 19, 2020 Nigerian government through the Federal Ministry of Education ordered the closure of all schools at various levels. Most nations of the world switched to virtual classes in the wake of the global pandemic but in Nigeria due to infrastructure deficit, students were not offered many alternatives to learning. A greater percentage of the students were cut-off completely from lessons. Chukwuemerie and Ugwude (2021) noted
also that the people that could afford it embarked on virtual learning while most learners lost out. This is more so especially that children in rural and underserved communities in Nigeria were left behind as they are/were not equipped to adapt or transition to new methods of learning.

Woomer et al. (2021). Observed also that in the heat of the COVID-19 pandemic, the Nigerian government declared all public schools closed and ordered all schools to switch to virtual mode of instructions. This idea that was practiced all over the world “was not free from challenges to a majority of students which included the inability for families to purchase and subscribe to satellite networks, non-existent connectivity, erratic electricity supply, and lack of access to computers and other sophisticated ICT devices that aid internet-based learning.” These challenges were in addition to the normal challenges teachers face in the country such as lack of financial support for in-service training and poor infrastructure.

Ambe and Agbor (2014) recommended that Pre-employment aptitude test should be administered on would be teachers to check for elements of competency before they are employed. Competency here means a set of demonstrable characteristics and skill that enable and improve efficiency or performance of a job.

Mundal (2018) sees Competencies as the requirements of a “competency-based” teacher education and include the knowledge, skills and values a teacher-trainee must demonstrate for successful completion of a teacher education programme. Virtual instructional competence could be defined as having the skillset on the use of computers, satellite networks, and other ICT devices that aid internet-based learning.

Goodyear et al. (2001) defined online teaching and learning as that which takes place over the internet or intranet. The problem with the conceptualization of digital competence is that in the scientific literature, there is no consensus on what it is. O’Neil (2014) admonished that online learning is not “slapping classroom content online, but the online teacher must use technology to enhance the course content.” Digital competence is a combination of knowledge, talents, skills, and attitudes linked to the use of technology to perform tasks, solve problems, communicate and manage information.

Balasubramanian (2020) argued that “Online teaching pedagogy is a method of effective teaching practice specifically developed for teaching via the internet. It has a set of prescribed methods, strategies, and practices for teaching academic subjects in an online (or blended) environment, where students are in a physical location separate from the faculty member”.

Virtual instruction involves sole online teaching or a combination of face-to-face with online instruction. All digitally transmitted instructional activities are done online and therefore they are virtual. Virtual instructional competence is the ability to effectively carryout instructional activities online or digitally. Virtual instruction could come in the form of zoom, Facebook, twitter, google, yahoo messages, emails, Instagram, telegram, WhatsApp, Webinars, E-content, radio and television messages as well as other synchronous and asynchronous media.

Western Sydney University (2020) defined Digital literacy as “having the skills you need to live, learn, and work in a society where communication and access to information is increasingly through digital technologies like internet platforms,
social media, and mobile devices”. Digital Literacy according to Spires et al. (2018) is the ability to locate, create, and communicate digital content.

The virtual instruction competencies must therefore relate to academic personnel and professional preparation, professional growth, classroom interaction and evaluation (Macaulay, 2011). Increasing desire for better student achievement is becoming worrisome in Cross River State. Many educational challenges confront both the parents and the teachers. There is also rising nation's economy. All these call for improved teacher competence, especially with the introduction of tourism as a teaching subject in the school curriculum.

Natasha (2011) while writing on Competency and academic achievements of secondary school students revealed some basic requirements for teacher competence to include: “knowledge and understanding of students and their learning styles, the subject matter, the curriculum among others”. The Author further enumerated “Teacher competence skills to include pedagogical knowledge, and the ability to use a wide range of teaching strategies skilfully”.

Rahaman (2010) describes teachers as professionally trained and certificated personnel prepared to manage and control instructional process for teaching and learning activities to take place. Teachers must prepare lesson plans, produce instructional materials and adopt appropriate teaching strategies to achieve objectives in their respective subjects for effective learning. Effective teachers need to be equipped with all these skills and attitudes by which they can help the students to learn. In tourism as a subject, such demands are even becoming more pressing because it is a new subject area in the school curriculum.

Onlineinterpersonalskills.com (2022) observed that “Teachers not only interface with students, but with other teachers, school administration staff and parents. Strong interpersonal skills, especially communication are the hallmark for a teacher”. Interpersonal skills are the sum total of the individual’s ability to interact effectively with other people. An individual’s interpersonal skills also determine one’s ability to initiate, develop and maintain caring as well as productive relationships (Angeles, 2012:3).

Tourism is an activity that is experiencing rapid growth even in the time of economic crisis. Tourism teachers need to meet the instructional demands of the subject owing to the rapid growth of the industry all over the world, students of tourism need sound knowledge, proper attitude and functional skills for quick employment after schooling. A wide variety of occupations exist which can be performed after graduation but tourism seems to provide easier employment. Tourism graduates tend to attract easy access to the job market despite the high competitiveness in the labour market. With increasing use of technology that has been described as a bedrock for global development, many nations of the world have keyed into it (Okonji, 2014). This has also facilitated the expansion of the tourism industry. Essentially however, technology has become the primary engine of economic growth transformation in any society.

The delivery of quality tourism instruction in the classroom system depends largely on the quality and competence of the tourism teachers. This is because the teachers are expected to perform the important functions of guiding the learners, directing them, evaluating their achievements and impacting knowledge. Teachers
also ask and answer relevant questions among others, for maximum benefits of the learners. Following the developments of the post-covid-19 pandemic, teaching functions are on-going and virtual. This study wonders the level of virtual instructional competence of teachers generally, but more importantly, the competence among teachers of tourism in Calabar South Local Government Area.

1.1 Statement of the problem

Tourism, as all other school subjects, is facing many challenges which need urgent attention. The major problem is to survey the virtual instructional competence of the tourism teachers. Even the traditional subjects in the school curriculum have challenges associated with teacher competence, therefore, for a new subject such as tourism, there seem to be very little researches with respect to teacher competence especially as related to virtual dimensions which are the new normal.

The related virtual instructional competence areas of interest include the basic digital competences, online pedagogy, interpersonal skills, and professional competence, knowledge of subject matter and learners and collaborative teamwork. The problem of this study was therefore to survey the status of these virtual instructional competences among tourism teachers in secondary schools in Calabar South Local Government Area.

1.2 Purpose of the study

This study was designed to achieve the following:

Investigate how widely available are the virtual instructional competences among tourism teachers in secondary schools in Calabar South L.G.A.
Determine the gender of tourism teachers that has more virtual instructional competences than the other.
Align teachers’ years of teaching experience with their level of virtual instructional competence.
Establish which of the virtual instructional competences are most widely available among the teachers of tourism in Calabar South.
Find out the challenges facing the teachers of tourism in their acquisition of virtual instructional competencies in Calabar South L.G.A.

1.3 Research questions

The following questions were raised to guide the study:

What is the status of each of the following virtual competences among tourism teachers in secondary schools in Calabar South of Cross River State (interpersonal skills, basic digital competence, online pedagogy, and professional competences, knowledge of subject matters and learners and collaborative team work)?
What is the degree of distribution of virtual competences between male and female tourism teachers in Calabar South Local Government Area?
Do tourism teachers with more years of teaching experience score higher in virtual instructional competence than those with fewer years of experience in Calabar South Local Government Area?
Which virtual instructional competence is most widely available among tourism teachers in Calabar South Local Government Area?
What are the challenges facing the teachers of tourism in the acquisition of virtual instructional competence in Calabar South Local Government?

Hypothesis one There is no significant difference in the mean distribution of virtual competences between male and female tourism teachers in Calabar South Local Government Area.

1.4 Methodology

The design for the study was a descriptive survey. Descriptive statistics of mean and simple percentages were used to answer most of the research questions Except the only hypothesis where independent t-test analysis was used. Although descriptive statistics in most cases are used as a subsection of a quantitative study. However, this present study aligns itself with Loeb et al. (2017) who argued that “Descriptive analysis could stand alone as a research product, in special circumstances”. The circumstance of our research is favoured by this argument because we have identified socially important phenomena (virtual instructional competence among teachers) that have not previously been recognized in the study area. Loeb et al. (2017) equally noted that “Descriptive analysis is also relevant in all types of research; it can stand alone as a complete research project or supplement causal analyses”.

The study population was taken from the 39 Secondary Schools in Calabar South, it is one of the Urban Local Government Areas that makeup Calabar Metropolis in Cross River State, Nigeria. In order to obtain a representative sample, the stratified simple random and purposive sampling techniques were used in subject selection. A total sample of 60 tourism teachers from 30 secondary schools who teach Senior Secondary 2 and 3 (SS2 and 3) students Tourism (2 Teachers per school) were drawn from the population of 75 tourism teachers in 39 secondary schools in Calabar South Local Government Area.

The selection procedure involved first stratifying the schools into two (those who offer Tourism and those that do not offer tourism). 31 schools were found to offer Tourism and 30 were purposively picked. Secondly, using the hat-and-draw method, in each of the schools selected, ‘Yes’ and ‘No’ were written on pieces of papers, folded and dropped in a container. In each school with Tourism Teachers, only 2 Papers carried the ‘Yes’ option. The two teachers who picked ‘Yes” became subjects for the research. In all 60 Teachers including 22 males and 38 females were selected for the study.
1.5 Instrumentation

The instrument used for data collection in this study was “virtual Instructional Competences among Tourism Teachers in Secondary Schools Questionnaire (VICATTSSQ). A 28 items questionnaire was divided into two parts. Section A elicited information for gender and years of teaching experience. Section B elicited information on the indication of variables in virtual instructional competences like interpersonal skills, basic digital competence, and knowledge of subject, collaborative teamwork and challenges of virtual instruction. The section also comprised Likert type responses scales designed into four columns as strongly agree (SA) with a score of 4 points, agree (A) with a score of 3 points, disagree (D) with a score of 2 points and strongly disagree (SD) with 1 point.

1.6 Data analysis and interpretation

1.6.1 Research question I

What is the status of each of the following virtual competences among tourism teachers in secondary schools in Calabar South of Cross River State (basic digital competence, online pedagogy, interpersonal skills, and professional competences, knowledge of subject matters and learners and collaborative team work)?

To answer this research question, data from items 1-24 of section B of the instrument were computed and simple percentage was used to describe them as shown on Table 1.

Table 1 indicates that with respect to interpersonal skills 27 (45%) of the respondents strongly agreed, 10.8 (18%) agree, 12.5 (20.8%) disagree and 9.75 (16.25%) strongly disagree. In basic digital competence, the responses were as follows: strongly agree 26.5 (43.75%), agree 18.5 (30.8%), disagree 8 (13.3%) and strongly disagree 7.25 (12.1%). The responses on items on online pedagogy indicated the
following: strongly agree 25.5 (42.5%), agree 14.5 (24.2%), disagree 14 (23.3%) and strongly disagree 6 (10%). On professional competence, the results are as follows: strongly agree 30 (50%), agree 16.5 (28%), disagree 9.25 (15%) and strongly disagree 3.75 (6.25%). Responses on knowledge of subject matter revealed the following: strongly agree 29.75 (49.6%), agree 15.75 (26.25%), disagree 10.3 (17.1%), strongly disagree 4.25 (7.1%). The responses on challenges indicate the following: strongly agree 16.75 (27.92%), agree 10.5 (17.5%), disagree 13 (21.7%) and strongly disagree 19.75 (32.9%). The result reveals that professional competence has the highest status, followed by knowledge of subject matter and interpersonal skills.

Figure 1 shows that Knowledge of subject matter (KSM) (49.60%) is the virtual instructional competence mostly held by most of Tourism Teachers followed by Collaborative Team Work and Interpersonal skills (IS).

Figure 2 shows that on gender and virtual instructional competence, the female gender scored highest in Knowledge of subject matter (KSM) and Interpersonal skills (IS) while males dominated in Basic digital competence (BDC), online pedagogy (OP), professional competence (PC) and Collaborative Team work (CTW).

Figure 3 shows that Most respondents agreed that teachers’ years of teaching experience increases their virtual instructional competences with collaborative team work (CTW) being the highest followed by Interpersonal skills (IS) and online Pedagogy (OP). Interpretation of Abbreviations on the figures. Interpersonal skills (IS), Basic digital competence (BDC), Online pedagogy (OP), Professional competence (PC), Knowledge of subject matter (KSC), Collaborative teamwork (CTW), Challenges (C).
Fig. 2 Bar chart showing gender and virtual instructional competence of male and female scores of tourism teachers in each of the variable

Fig. 3 A bar chart showing teacher’s years of experience and virtual instructional competence of tourism teacher in each of the variable
### 1.6.2 Research question 2

What is the degree of distribution of virtual competences between male and female tourism teachers in Calabar South Local Government Area?

Data for answering the research question were from responses to items of section A and section B scores were translated into simple percentage as shown on Table 2.

From the result on Table 2, it can be seen that females scored higher than male on interpersonal skills with a score of 350 (50.4%), knowledge of subject matter with a score of 486 (55.8%). While the male gender scored higher in basic digital competence with a score of 369 (51.3%), online pedagogy with a score of 358 (50.1%), professional competence with a score of 395 (51.7%) and collaborative teamwork with a score of 374 (51.1%). From the result it can be seen that male tourism teachers are more competent with virtual instructional competence than their female counterparts.

#### Hypothesis one

There is no significant difference in the mean distribution of virtual competences between male and female tourism teachers in Calabar South Local Government Area.

To further ascertain whether there is any statistical difference in the mean distribution of virtual competences between male and female Tourism Teachers in the study area, the data obtained is subjected to the independent t-test analysis. The results of the finding are as shown on Table 3.

Not significant at .05 level, critical $t = 2.00$ df = 58.

The result of analysis presented in Table 3 reveals that the calculated t-value of 1.121 is less than the critical t-value of 2.00 at .05 level of significance with 58 degree of freedom. The result of the analysis is not significant since the calculated

| Variable                      | Male score | %     | Female score | %     |
|-------------------------------|------------|-------|--------------|-------|
| Interpersonal skills          | 344        | 49.6  | 350          | 50.4  |
| Basic digital competence      | 369        | 51.3  | 351          | 48.9  |
| Online pedagogy               | 358        | 50.1  | 357          | 49.9  |
| Professional competence       | 395        | 51.7  | 369          | 48.3  |
| Knowledge of subject matter   | 385        | 44.2  | 486          | 55.8  |
| Collaborative teamwork        | 374        | 51.1  | 358          | 48.9  |

Source: Field work 2021

| Variables                      | N   | Mean  | SD   | t    |
|--------------------------------|-----|-------|------|------|
| Male                           | 22  | 101.14| 141.11|      |
| Female                         | 38  | 59.74 | 128.11| 1.121|
value is less than the critical value, with this result, the null hypothesis is retained. This means that, there is no significant difference in the mean distribution of virtual competences between male and female tourism teachers in Calabar South Local Government Area.

1.6.3 Research question 3

Do tourism teachers with more years of teaching experience score higher in virtual instructional competence than those with fewer years of experience in Calabar South Local Government Area of Cross River State?

Data for answering the research question were from responses to items of section A and section B scores were translated into simple percentages as shown on Table 4.

Table 4 indicates that teachers with 1-5 years teaching experience (N=262 (37.6%) scored highest in interpersonal skills. In basic digital competence, teachers with 1-5 years of teaching experience again scored highest (N=217 (29.3%), followed by those above 15 years (N=195 (26.3%). This implies that the teachers with 1-5 years’ experience, readily embrace virtual competence (as they are the ICTs generation teachers) and those with above 15 years teaching experience (may be as a result of training and retraining in the course of their teaching job).

1.6.4 Research question 4

Which virtual instructional competence is most widely available among tourism teachers in Calabar South Local Government Area of Cross River State?

| Variable                      | Responses | Total |
|-------------------------------|-----------|-------|
| Interpersonal skills          | 696       |       |
| N=262 (37.6%)                 | N=176 (25.3%) | N=193 (27.7%) | N=65 (9.3%) | (100%) |
| Basic digital competence      | 741       |       |
| N=217 (29.3%)                 | N=169 (22.8%) | N=160 (21.6%) | N=195 (26.3%) | (100%) |
| Online pedagogy               | 855       |       |
| N=296 (34.6%)                 | N=214 (25.0%) | N=190 (22.72) | N=155 (18.1%) | (100%) |
| Professional competence       | 773       |       |
| N=171 (22.1%)                 | N=255 (29.1%) | N=171 (22.1%) | N=206 (26.6%) | (100%) |
| Knowledge of subject matter   | 746       |       |
| N=223 (29.8%)                 | N=176 (23.7) | N=187 (25.1%) | N=160 (21.4%) | (100%) |
| Collaborative teamwork        | 834       |       |
| N=319 (38.2%)                 | N=167 (20.0%) | N=181 (21.7%) | N=167 (20.0%) | (100%) |
| Challenges                    | 577       |       |
| N=100 (17.3%)                 | N=128 (22.2%) | N=183 (31.7%) | N=166 (28.8%) | (100%) |

Source: Field work 2021

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To answer the research question, responses to items 1-28 in section B were computed and simple percentage was used to describe the items as show in Table 1. The result from Table 1 shows that professional competence with a score of 30 (50%) is the virtual instructional competence is most widely available among tourism teachers. The pie chart in fig. 4 goes to buttress this point.

1.6.5 Research question 5

What are the challenges facing the teachers of tourism in the acquisition of virtual instructional competence in Calabar South Local Government Area of Cross River State?

To answer the research question, responses to items 25-28 of section B were computed and simple percentage was used to describe the items as show in Table 5.

Table 5 Challenges of virtual instructional competence

| Responses                                      | SA  | A   | D   | SD   | Total |
|------------------------------------------------|-----|-----|-----|------|-------|
| 25. Virtual instruction is not easy for me     | 5 (8.33%) | 7 (11.66%) | 11 (18.33%) | 37 (61.66%) | 60 (100%) |
| 26. E-learning is multimodal, this makes it impossible for me to cope. | 2 (3.33%) | 19 (31.66%) | 24 (40%) | 15 (25%) | 60 (100%) |
| 27. I teach better when I interact face to face with my students. | 33 (55%) | 8 (13.33%) | 8 (13.33%) | 11 (18.33%) | 60 (100%) |
| 28. I do not have a computer set.             | 27 (45%) | 8 (13.33%) | 9 (15%) | 16 (26.66%) | 60 (100%) |

Source: Field work 2021
From the result in Table 5 and Fig 5, the challenges of virtual instruction faced by tourism teachers is the multimodality of virtual instruction and this makes it difficult for the teachers to cope. This can be seen in Item 27 with a mean score of 33 (55%), this is followed by item 28; teachers’ preference to the traditional face to face interaction 27 (45%).

2 Discussion

2.1 Research question one

The result of analysis of research question 1 showed that professional competence has the highest status, followed by knowledge of subject matter and interpersonal skills. The finding is in agreement with Adeyemon (2009) who conducted a research on teaching competence of teachers at schools in three southern provinces of Thailand and found out that majority of teachers studied were highly competent in teaching. This finding also agrees with Rahaman (2010) who described teachers as professionally trained and certificated personnel prepared to manage and control instructional process.

2.2 Research question two

From the result it can be seen that male Tourism Teachers are more competent with virtual instruction than female tourism teachers. The result of the study is in line with the findings of Rozitis (2017) who investigated the differences between men and women in ICT knowledge and management and found out that female teachers have less mastery than male teachers in ICT skills such as “computer and Internet programming, database design, spreadsheets among others.

Hypothesis one From the result on Table 3, it can be seen that there is no significant difference in the mean distribution of virtual competences between male and female
tourism teachers in Calabar South Local Government Area. This finding is contrary to the findings on the research questions above on Table 2, but agrees with Prieto et al. (2020), who observed that “there are no significant gender difference between teachers with respect to the application of e-skills by teaching professionals, despite the existence in other contexts of a large digital gender gap in new technology professionals”.

2.3 Research question three

The result of the findings indicates that teachers with less years of teaching experience tend to perform better with virtual competence (as they are the ICTs generation teachers) and those with above 15 years teaching experience (may be as a result of training and retraining in the course of their teaching job).

The finding of the study to an extent agree with Olu-Ajayi (2019) who found out that teachers with long teaching experience (above 15 years) seem to be more favourably disposed to teaching students online than the traditional method. He also found that such teachers had the greatest degree of students understanding, satisfaction and stabilities in teaching the subject while teachers with short teaching experience indicated the least.

The finding of this study contradicts the finding by Ozuna (2015) with the result that virtual tourism teachers with medium experience were more highly disposed to improving instruction than those with short and long experience.

2.4 Research question four

The result from the analysis of research question four indicates that professional competence with a mean score of 30 (50%) is the virtual instructional competence is most widely available among tourism teachers.

The finding of the study is in consonance with the finding of Prieto et al. (2020) which said teachers are in the process of adapting to develop the digital skills they need for the use of Information and Communication Technologies (ICTs), a process that must be permanent and in which there are still knowledge gaps undermining its application.

2.5 Research question five

The challenges of virtual instruction faced by tourism teachers is the multimodality of virtual instruction and this makes it difficult for the teachers to cope. This can be seen in Item 27 (I teach better when I interact face to face with my students – Teacher’s preference of the face-to-face interaction) with a mean score of 33 (55%), this is followed by item 28; (Teachers not having a computer set) 27 (45%).

This agrees with Siemen (2017) who stated that students find it difficult to adapt to online learning environment immediately after traditional classroom learning. Due to the sudden change, they are not able to adapt to the computer-based learning. Students who have always studied in the traditional classroom mind-set are not able to focus on online platform. The finding is also in line with Ebohon et al. (2021) who revealed
also that because technology has not been well integrated into the educational systems, Teachers and students faced challenges in adapting to online classes and migrating to remote learning within a short period of COVID-19 emergence and closure of schools.

3 Conclusion

Based on the results of the findings, the study concluded that professional competence is the most widely used virtual instructional competence among tourism teachers in Calabar South Local Government. This is significant because all teachers employed in the study area have at least a bachelor’s degree in education which means they are professionally qualified to teach in Nigeria. But this should not be held as the only virtual instructional competence at the expense of others like digital and online pedagogy.

Other virtual competences such as basic digital competence, and online pedagogy are not widely available to the teachers in the study area. This accounts for the slow pace of adaptation to virtual learning in the study area. There is need to encourage tourism teachers (across gender divides, years of teaching divides) in secondary schools in Calabar South Local Government to adapt to the trending skill of virtual instruction delivery for effective teaching and learning of Tourism.

3.1 Recommendations

Based on study results, the following recommendations were made: Tourism teachers should be ICT compliant so as to be able to use effectively the virtual instructional variables listed in the study. There should be training/retraining of teachers on virtual instructional skills. This could be done by individual teachers or sponsored by governments.

There should be a shift in instructional delivery from the traditional face-to-face instruction to virtual instruction by tourism teachers. This should begin as a matter of policy where blended learning should be encouraged so as to meet up with what is obtainable worldwide.

Declarations

The Authors have no relevant financial interests to disclose.

Conflict of interest None.

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