ATTITUDES ON ICT INTEGRATION AMONG SPAMASTINSTRUCTORS IN THE NEW NORMAL

ABSTRACT

The study of attitudes on Information and Communication Technology (ICT) integration in the new normal was conducted at Southern Philippines Agri- Business and Marine and Aquatic School of Technology. Descriptive-research design was employed and a total enumeration of the respondents was used. Data were gathered with the used of adopted survey questionnaire and the data collected were subjected to statistical analysis using percentage, mean and frequency count.

The result of the analysis revealed that most of the respondents are female. Moreover, the SPAMAST instructors had very high positive attitudes of integrating ICT in teaching. Therefore, they are willing to learn more about effective ICT integration approaches to teaching and learning. With regards to obstacles faced by the teachers, it was revealed that a minimal obstacles faced by the teachers after incorporating it in teaching. The effort when integrating ICT tools in teaching, network connectivity, ICT tools are changing too fast to be up -to date and students lack of ICT skills were the obstacles faced by the teachers in integrating ICT in teaching.

Keywords: Attitudes, ICT, Integration, SPAMAST, instructors, New Normal

1. INTRODUCTION

The COVID-19 pandemic affected the world's economy and the educational system (Zethembe, 2020). As the Philippines faced a critical situation due to the rise of the said health crisis, it became urgent to explore innovative learning modalities that would facilitate migration from traditional to remote teaching and learning (Junaini, 2020). Higher Education Institutions (HEIs) in the country adopted a flexible learning scheme with the integration of Information and Communication Technologies (ICTs) (Legarde, 2022).

During the pandemic, e-learning resources were critical in assisting colleges and universities in facilitating student learning during the closure of universities and schools (Subedi, 2020). Online platforms such as Google Classroom, Zoom, interactive learning environments, social media, and various community channels such as Messenger, WhatsApp, and WeChat were explored and tried for teaching and learning. Teachers were expected to come up with innovative ideas to help solve the drawbacks of virtual teaching. The teaching and learning process online was driven by the needs of the teachers and the learners. This was considered as the development of online learning with the use of technologies, as it offered cost savings for the learners, teachers, and the institution, increased flexibility of teaching and learning, and improved accessibility to education (Kirkwood & Price, 2017).

In the new normal setting, students and teachers agreed to use a variety of e-learning resources (e.g., digital library, mobile applications, YouTube) with students using available tools (e.g., desktop computers, laptops, tablets) and integrating their lessons into online learning systems, also known as Learning Management Systems (LMS), and meeting

platforms (e.g., Edmodo, Google Classroom, Zoom, Google Meet) for teaching and learning processes (Ramchmadtullah et al., 202). A Critical Review by Teachers on the Online Teaching-Learning during the COVID-19, according to (Hassan et al., 2020), resulted in the most important factor affecting online teaching being the digital skills of teachers and students. Hence, most of the teachers were seen struggling to teach online, and some of them used easy but not very versatile tools to stay connected with students. Teachers faced technical issues in creating e-content and in online delivery of instruction.

The implementation of the online learning system required teachers to integrate educational technology in the preparation of lessons, choosing teaching strategies, designing learning assessment and evaluation, and improving class management (Juanda et al., 2021). In delivering content using online platforms, it was required to migrate the lesson, assessment tools, and audio-visual materials in an acceptable format needed by a software application (Gepila Jr., 2020).

Thus, this study was timely as it determined the attitudes on ICT integration among SPAMAST instructors in the new normal. Some studies showed a lack of information regarding the integration of ICT into the new normal delivery mode of teaching, and some literature failed to mention the obstacles faced by the teachers or instructors of using ICT in teaching.

METHODOLOGY

The study was conducted at Southern Philippines Agri-Business and Marine and Aquatic School of Technology (SPAMAST), Malita, Davao Occidental, Philippines, in the four (4) institutes namely: Institute of Teacher Education and Information Technology (ITEIT), Institute of Human Services (IHS), Institute of Fisheries and Marine Sciences (IFMS), and Institute of Agricultural Technology and Entrepreneurial Studies (IATES).

SPAMAST adopted the new normal class setting through their Learning Management System and Learning Continuity Plan for the school year 2020-2021 to present. We chose SPAMAST as our respondent institution to contribute to the school together with the instructors to integrate ICT in the new educational setting.

2.1 Research Design - The study was conducted employing the quantitative research method, particularly the descriptive research design.

A descriptive study was conducted to determine the attitudes on ICT integration among SPAMAST instructors in the new normal. Besides, this study also determined the teachers' obstacles faced during the integration of ICT in teaching.

2.2 Sampling Design and Technique - The researchers applied the total enumeration procedure as the study's sampling technique since all teachers of the four institutes, namely Institute of Teacher Education and Information Technology (ITEIT), Institute of Human Services (IHS), Institute of Fisheries and Marine Sciences (IFMS), and Institute of Agricultural Technology and Entrepreneurial Studies (IATES), were the survey's respondents.

2.3 Respondents of the Study - The respondents of the study were the ITEIT, IHS, IFMS, and IATES regular faculty members who were employed for the School Year 2021-2022 and teaching through online distance learning modality at Southern Philippines Agri-Business and Marine and Aquatic School of Technology (SPAMAST) Malita, Davao Occidental. They were distributed throughout the four (4) institutes: Institute of Teacher Education and Information Technology (ITEIT), Institute of Human Services (IHS), Institute of Fisheries and Marine Sciences (IFMS), and Institute of Agricultural Technology and Entrepreneurial Studies (IATES).

2.4 Data Analysis - The data were gathered through answered Google Form and printed survey questionnaires from the respondents of Southern Philippines Agri-business and Marine and Aquatic School of Technology. Moreover, it was evaluated according to the respective range of means, description, and interpretation of data.

This study involved the gathering of data through flexible methods, Google Form, and printed survey questionnaires. Moreover, the researchers observed the following procedures in the gathering of data.

The researchers asked permission from the VPAA, campus director, and school deans to conduct the study. The researchers gave an orientation to the respondents regarding the purpose and objectives of this study. There were 66 faculty members at Southern Philippines Agri-Business and Marine and Aquatic School of Technology (SPAMAST). In addition, Google Form and printed survey questionnaires were provided to gather the necessary data needed for the study. The teachers were given ample time to fully answer the questionnaires.

The researchers gathered the answered Google Form and printed survey questionnaires from the respondents, which were tabulated for the collection and tabulation of data. All collected data were treated with utmost respect and confidentiality. The gathered data was tallied, collated, and tabulated for processing and analysis. The results were analyzed with the use of appropriate statistical tools as verified by the statistician.

3. RESULTS AND DISCUSSION

Table 1 shows the socio-demographic profile of the sixty-six (66) faculty members of Southern Philippines Agri-business and Marine and Aquatic School of Technology of Malita, Davao Occidental. As to the gender, the study revealed that 36 or 54.50% were female while 30 or 45.50% were male. In terms of age, it has the of mean 37.88, and data revealed the highest percentage of age, ranging from 30-39 or 31.82% and the lowest percentage is ranging from 60-69 or 4.55%.

In terms of length of service, it has the mean of 8. 53 and the highest percentage is ranging from 1-5 and 5-10 years with 9.1 %. Moreover, the lowest percentage is ranging from 1-5 months, 5-10 months, 10-15 years and 15-20 years with 1.5%.

Table 1. Socio- Demographic Profile of the Respondents

PARTICULARS	FREQUENCY (F)	PERCENTAGE (%)
AGE		
20-29	18	27.27
30-39	21	31.82
40-49	14	21.21
50-59	10	15.15
60-69	3	4.55
Mean=37.88		
GENDER		
Female	36	54.50
Male	30	45.50
LENGTH OF SERVICE		
1-5 months	1	1.5
5-10 months	1	1.5
10ms- 1 year	4	6.1
1-5 years	6	9.1
5-10 years	6	9.1
10-15 years	1	1.5
15-20 years	1	1.5
20–25 years	2	3.0

25-30 years	3	4.5
30-35 years	3	4.5
Mean = 8. 53		

Teacher's Attitudes on ICT Integration

The Table 2 shows the Teacher's Attitudes on ICT Integration. The Statement number 2 has the highest mean of 4.77 which described very high and indicates very high positive attitudes of teachers' integration of ICT in teaching. Moreover, statement 10 has the lowest mean of 2.04 which described low and indicates low attitudes of teachers' integration of ICT in teaching. The level of teachers' attitudes towards teaching with the integration of Information and Communication Technology (ICT) has its overall mean of 4. 45 which described very high and indicates very high positive attitudes of teachers' integration of ICT in teaching. The result is supported by Maru et al., (2021) stated that the teachers are more willing to adapt with ICT integration because of the eagerness to explore the features and attain new experience that they have. Furthermore, Barkat & Saeed (2021) supported that teachers have the positive attitudes in using the technology, and they are more likely to adopt the use of technology and apply it effectively.

Table 2. The level of teachers' attitude towards teaching with the integration of Information and Communication Technology (ICT)

PARTICULAR	MEAN	STANDARD DEVIATION	DESCRIPTION
1. The teachers would like to learn more about effective ICT integration.	4.74	O.50	Very High
2. The teachers would like to know what resources are available if the school decides to adopt ICT.	4.77	0.48	Very High
3. The teachers would like to know how ICT delivers better performance than traditional learning.	4.72	0.56	Very High
4. The teachers would like to know how ICT system increases school competitiveness.	4.68	0.61	Very High

5. The teachers would like to know how ICT integration improves the quality of interaction among students and instructors.	4.75	0.55	Very High
6. The teachers would like to know how to use technology.	4.74	0.50	Very High
7. The teachers would like to know what qualifications they must have.	4.66	0.56	Very High
8. The teachers will use ICT in learning and teaching in the future.	4.68	0.58	Very High
9. The teachers plan to use ICT in school as part of learning and teaching often.	4.68	0.55	Very High
10. The teachers are not concerned about ICT integration in school.	2.04	1.37	Low
Mean	**4.45**	**0.40**	**Very High**

Obstacles Faced in Using ICT

The Table 3 shows the obstacles faced by the teachers of using Information and Communication Technology in teaching. Statement number 1 “the teachers have to put in extra effort when integrating ICT tools in teaching”, has the highest mean of 4.03 which described high and indicates least obstacles faced by the teachers after incorporating it in teaching. Statement number 15 “the teachers lack confidence in integrating ICT tools in their teaching” has the lowest mean of 2.16 which described low and indicates a lot of obstacles faced by the teachers after in incorporating it in teaching.

The overall mean is 3.25 which described average and indicates minimal obstacles faced by the teachers after incorporating it in teaching. Based on the data gathered the effort when integrating ICT tools in teaching, network connectivity, ICT tools are changing too fast to be up -to date and students lack of ICT skills were the obstacles faced by the teachers in integrating ICT in teaching.

These reasons are seemed to be line with the study of Hafifah (2022) stated that the obstacles faced by the teachers in integrating ICT in teaching is mostly technical and internet connectivity. It was also supported by Salehi (2020) that insufficient technical skills and access to internet connectivity were the obstacles faced by the teachers in using ICT in the classroom.

Table 3. The level of obstacles faced by the teachers of using Information

and Communication Technology.

PARTICULAR	MEAN	STANDARD DEVIATION	DESCRIPTION
1. The teachers have to put in extra effort when integrating ICT tools in their teaching.	4.03	1.10	High
2. The teachers do not have extra time to set up the ICT tools for their teaching.	2.97	1.08	Average
3. The teachers have problems getting quality training program.	3.21	1.10	Average
4. The teachers have difficulties getting support from technical staff.	2.90	1.14	Average
5. The hardware available is not sufficient to accommodate ICT supported teaching.	3.37	1.00	Average
6. The software available is not sufficient to accommodate ICT supported teaching.	3.37	0.92	Average
7. Certain software is difficult to learn and use.	3.39	1.09	Average
8. ICT tools are changing too fast to be up- to date.	3.89	0.97	High
9. The network connectivity is poor.	3.95	1.16	High
10. The hardware available is already outdated to accommodate ICT supported teaching.	3.31	0.82	High

11. The software available is already outdated to accommodate ICT supported teaching.	3.15	0.80	Average
12. Students lack ICT skills.	3.43	0.89	High
13. Students give negative feedback on ICT supported teaching.	3.09	0.77	Average
14. The teachers find it difficult to change from my current teaching practice to integrate ICT tools in teaching	2.48	0.93	Low
15. The teachers lack confidence in integrating ICT tools in my teaching.	2.16	0.92	Low
Mean	**3.25**	**0.55**	**Average**

4. CONCLUSION

The study in “Attitudes on ICT Integration Among SPAMAST Instructors in the New Normal” was conducted using quantitative study particularly a descriptive research design. It employed total enumeration of the respondents as the study’s sampling technique. The data were gathered using adopted questionnaire particularly in the attitudes on ICT integration and the obstacles faced by the teachers in integrating ICT in teaching. Percentage, mean and frequency count were used in the data analysis.

The study revealed 4.45 mean which described very high and indicates very high positive attitudes of the teachers in integrating ICT in teaching. The grand mean of the gathered data was 13. 52 which revealed positive attitudes of incorporating ICT in teaching. Moreover, the highest mean of the gathered data shows, age raging from 30- 39 with the frequency of 21 and has its 31.82% which described the highest population who responded in the study. Furthermore, the lowest mean was 3. 25 which indicates minimal obstacles faced by the teachers in integrating ICT in teaching. According to the data gathered, the following statements have a high percentage of support: effort when integrating ICT tools in teaching network connectivity, ICT tools are changing too fast to be up -to date and students lack of ICT skills.

Based on the findings and statistical results of the study, the conclusions were drawn.

1. The study concludes that the attitudes of SPAMAST instructors towards ICT integration in teaching are very high, as indicated by a mean score of 4.45. This suggests that the instructors have a positive and favorable disposition towards incorporating ICT tools and technologies in their teaching practices. These findings highlight the willingness and readiness of the instructors to embrace and utilize ICT for effective teaching and learning.

2. The study findings indicate that the majority of the respondents fall within the age range of 30-39, accounting for 31.82% of the participants. This implies that teachers in this age group have shown the highest level of engagement and participation in the study. This demographic information provides valuable insights into the attitudes of a specific age group towards ICT integration, suggesting that this cohort may be more receptive to incorporating technology in their teaching practices.

3. The study reveals that teachers perceive minimal obstacles in integrating ICT in teaching, with a low mean score of 3.25. This implies that the instructors have successfully overcome barriers and challenges associated with the use of ICT tools and technologies. The results suggest that teachers have developed the necessary digital skills and have access to reliable network connectivity, contributing to a smoother integration process. However, it is important to note that further investigation may be needed to identify and address any remaining obstacles that may hinder effective ICT integration in teaching.

Overall, the study provides compelling evidence that SPAMAST instructors have positive attitudes towards ICT integration in teaching. These findings indicate a strong foundation for the implementation of ICT tools and technologies in the new normal educational setting, ultimately enhancing the quality and effectiveness of teaching and learning experiences.

Recommendations

Based on the conclusions made, the following recommendations are given.

1. The study suggests that SPAMAST should provide ongoing professional development and training programs for instructors to enhance their digital skills and knowledge. These programs should focus on advanced ICT tools, pedagogical strategies, and emerging technologies. By investing in professional development, instructors can stay updated with the latest trends and best practices in ICT integration, enabling them to deliver high-quality teaching and learning experiences.

2. SPAMAST should foster a culture of collaboration and mentorship among instructors, capitalizing on their positive attitudes towards ICT integration. Encouraging experienced instructors to mentor their peers and providing platforms for peer-to-peer learning will create a supportive environment for continuous improvement and innovation in teaching practices.

3. SPAMAST should conduct a comprehensive assessment to identify and address any potential obstacles in integrating ICT in teaching. This assessment can help gather deeper insights into challenges faced by instructors, leading to the development of targeted strategies and interventions such as additional technical support, improved infrastructure, and specific training modules. By addressing these obstacles, SPAMAST can ensure a smooth and effective integration of ICT in teaching, enhancing the learning experience for both instructors and students.

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