

EXPLORING THE E-LEARNING ENVIRONMENT OF HUMANITIES AND SOCIAL SCIENCES SENIOR HIGH SCHOOL LEARNERS: A GROUNDWORK FOR CREATING ONLINE INSTRUCTIONAL FRAMEWORK

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Abstract

This study explored the challenges and coping mechanisms of Grade 11 Humanities and Social Sciences learner participants concerning the e-learning environment during the 2021-2022 school years. To achieve the objectives, a sequential exploratory mixed-method design was utilized by conducting interviews with 15 learners and a survey of 30 learners. The qualitative data were analyzed through the thematic analysis of Braun and Clarke (2006) while the quantitative data were analyzed using descriptive statistics such as the frequency, percentage, mean, and standard deviation. The emerging challenges were grouped into four elements namely: (1) self-regulation; (2) teacher instructional delivery; (3) assessments; and (4) modern-day technologies. The identified coping mechanisms were the implementation of useful coping mechanisms for learners and effective self-planning. It was concluded that self-management, teachers' professionalism, problems with group-based learning, and technological shortcomings were the major challenges encountered by the participants. More so, concentration and focus, adaptation and innovation as well as time management were the top coping mechanisms applied by the participants to their e-learning environment.

Keywords: Challenges, Coping Mechanisms, Humanities and Social Sciences Learners, E-learning Environment, Online Instructional Framework

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Introduction

The sudden shift of our educational system worldwide due to the occurrence of the coronavirus disease 2019 (COVID-19) has greatly impacted, many of which include our country, the Philippines. As an effort to curb the spread of the virus, governments-imposed quarantine protocols and have opted to temporarily shut down the sector of education at all levels. This resulted in more than a billion learners around the globe being affected (Biana et al., 2020).

According to Almaiah and Alyoussef (2019), e-learning programs strive to be an integral part of curriculum development and delivery from supplemental to complimentary. The use of the e-learning method provides school leaders, teachers, and learners many advantages, such as enhancing effective teaching and learning, and an increase in the networks between educators and learners.

Hence, this research was focused on the exploration of the e-learning environment of Senior High School learners at Holy Angel University, specifically those in the Humanities and Social Sciences (HUMSS) strand, whose strand directly experienced the e-learning environment brought about by the COVID-19 pandemic. More so, as a HUMSS teacher for several years and in conducting this research study, the researcher opts to create and innovate online instructional modality and delivery of the said strand for effective, quality, and dynamic learning.

Thus, the researcher emphasized these topics to provide a deeper understanding of

online distance education at present given the circumstances brought on by the current pandemic. And, to supply information regarding the challenges encountered in the e-learning environment by the learners that may affect the effectiveness of e-learning and to stress the coping mechanisms of learners in the e-learning environment to know what further developments and improvements may be applied to obtain its full potential in carrying out its purpose about education.

Objectives

This proposed study aimed to explore the e-learning environment of HUMSS Senior High School learners in an online distance learning set-up.

1. What are the challenges encountered that affect the e-learning environment of HUMSS senior high school learner participants in terms of:

- 1.1 Self-regulation;
- 1.2 Teacher instructional delivery;
- 1.3 Assessments;
- 1.4 Modern-day technologies;
 - 1.4.a Hardware;
 - 1.4.b Learning Management Systems;
 - 1.4.c Technological tools and applications; and
 - 1.4.d Internet?

2. What are the coping mechanisms employed by the HUMSS Senior High School learners in coping with the challenges encountered in an e-learning environment?

3. What online instructional framework

may be developed to help HUMSS Senior High School learners cope with the challenges of an e-learning environment?

Literature Review

Despite the pandemic and its complications, preventive measures were taken in the hopes of providing education for all. In the Philippines, the flexible model of distance learning was adopted and implemented by the Commission on Higher Education (CHED) and the Department of Education (DepEd) despite numerous disagreements from parents, learners, and teachers alike (Fernando & Navarosa, 2020).

According to Pacheco (2020), the enormous adjustment of learners from physical face-to-face learning to pure online learning impacts both student learning and the educational institutions through which the e-learning environment becomes disembodied, transformed into digital and not actual, and there are no longer physical learning spaces such as buildings, gardens, laboratories, instead virtual and websites.

According to National University in the USA (2022), the trend and popularity of digital and virtual education have risen due to the COVID-19 Pandemic. With this, factors such as government support and readiness of various schools, colleges, and universities are the concerns and loopholes in this new kind of educational structure.

According to Bhagat et al. (2016), e-Learning became the supreme used platform to engage, collaborate, and connect learners

to teachers and their classmates. It also created a learning space where learners and educators around the world digitally interact. E-Learning provides free online resources that are accessible and available to everyone. However, in promoting the active engagement of the learners and the delivery of meaningful online learning settings, learners' perceptions towards online learning should be considered.

Methodology

Research Design

The research design that was used and utilized in this study was sequential exploratory mixed method design as it focused on the exploration of HUMSS Senior High School learners, particularly with their challenges and coping mechanisms in an e-learning environment which can be considered as an emergent variable. In a 2012 review of mixed methods, Johnson and Christensen demonstrated that they have useful and valid data using a combination of qualitative and quantitative approaches.

Population and Sampling

The sampling method that the researcher used was a purposive sampling method. This sampling method, also known as judgmental sampling, has a purpose in mind and usually pursues groups or individuals with similar characteristics or who fall to a specific range of criteria. According to Crossman (2020), a purposive sample is a non-probability sample that is chosen based on the objective of the research and the characteristics of a population.

Participants and Setting

The researcher conducted an interview and a survey of the learners from the Grade 11 HUMSS Senior High School Department of Holy Angel University for the school year 2021-2022. Furthermore, there were fifteen (15) key informants chosen following the explanation of Crouch and McKenzie (2006) in a qualitative research study that 15 interview participants will lessen some of the bias and validity threats. On the other hand, for the quantitative analysis, there were thirty (30) respondents chosen following the explanation of Ganti (2025) that the sample size of as small as thirty (30) respondents is generally and normally adequate to guarantee that the sampling distribution will approximately be spread in the normal curve. More so, it often increases the confidence gap of your population data set that is adequate to warrant assertions against your findings.

In the selection of the study's key

informants and respondents, the researcher set criteria for participants' specifications. The key informants and/or respondents must fit all the specifications needed for them to be legible for participation in the study. First, the key informant/respondent must be a Grade 11 HUMSS learner in Holy Angel University due to their exposure to an online distance learning modality as well as they are not directly affiliated with the researcher. Second, the key informant/respondent has been enrolled in the school year 2021-2022. Lastly, the Grade 11 HUMSS learner has been taking a class in an online learning environment to participate in the study. More so, the participant must be knowledgeable about technology and has access to any kind of hardware and software devices. In this way, the participants could easily provide answers that are sufficient and useful for the study.

The following tables show the distribution of the learner-participants.

Table 1 Distribution of Participants of the Interview per Section

Section	Frequency	Percent (%)
St. Finnian	4	26.67
St. Louise	4	26.67
St. Lucia	4	26.67
St. George	3	19.99
Total	15	100

Table 2 Distribution of Participants of the Survey per Section

Section	Frequency	Percent (%)
St. Finnian	8	26.67
St. Louise	8	26.67
St. Lucia	7	23.33
St. George	7	23.33
Total	30	100

Data Collection and Analysis

The data were collected through a virtual interview process using a Zoom meeting (for qualitative phase) and a Google forms (for quantitative phase) that was provided by the researcher on the available time of the key informants and/or respondents.

For qualitative analysis, the data that were collected in this research study were tabulated and categorized into themes. According to Braun and Clarke (2006), there are six (6) phases of thematic analysis which can describe, explore, and analyze data gathered by identifying main categories and using a thematic approach. Thus, the researcher used thematic analysis in exploring the data that were gathered from the fifteen (15) key informants. These data have further discussed in the next chapter to provide an in-depth description, explanation, and speculation. The researcher finalized themes by categorizing all the available information coming from the key informants.

For quantitative analysis, descriptive statistics were used as the researcher aimed to reveal the overall data pattern and as it

provided summaries about the sample and measures. The process of tallying and interpreting is to be performed right after the gathering of data from the circulated survey questionnaire. For the proper analysis and interpretation of the qualitative data gathered, the following statistical tests were utilized:

1. Frequency and Percentage. These statistical instruments were utilized to identify the demographic profile of the respondents as well as to represent the gathered data as it intends to show the different coping mechanisms applied by the Grade 11 HUMSS respondents concerning the e-learning environment.

2. Mean and Standard Deviation. This was used to classify and label the respondents in describing their challenges encountered in the e-learning environment during the School Year 2021-2022.

3. Likert Scale. This was utilized to analyze and measure the encountered challenges by the respondents. To measure the respondent's response, the five (5) point scale value was utilized as per Alonazi et al. (2020).

Table 3 Range Intervals for 5-Point Likert Scale Responses

Response Category	Scale Value	Range Interval
Strongly Agree	5	4.20-5.00
Agree	4	3.40-4.19
Neutral	3	2.60-3.39
Disagree	2	1.80-2.59
Strongly Disagree	1	1.00-1.79

Establishing Trustworthiness

In addition, Guba and Lincoln (1989) explained the importance of establishing trustworthiness in qualitative research that consists of four (4) major categories namely: credibility, dependability, transferability, and confirmability. To specify, the use of credibility is to determine and address the suitability of research pedagogy in terms of respondents' views and lived experiences. Peer debriefing and checking of preliminary findings are essential to check the credibility of the research procedures. To achieve dependability is to ensure that the research process is direct, logical, and traceable. In terms of transferability, it guarantees that the researcher is responsible for providing thick descriptions likewise the research can be transferred to various settings and contexts with other participants. Lastly, confirmability is concerned with establishing the researcher's findings and interpretations that are aligned with the gathered data and how conclusions have been reached. To generalize, to attain confirmability is to establish credibility, transferability, and dependability successfully.

Ethical Considerations

Informed consent will therefore be given in the interview process and in the administration of the interview that includes information about the study followed by ethical codes and the rights of the key informants/respondents. Furthermore, the interview guide and survey questionnaires will be submitted to authorities for validation to ensure that all the needed data will be gathered. The researcher sought opinions and suggestions from experts in the field of education.

The researcher sought the approval of HAU-IRB. Informed and parental consent became the basis for conducting data collection. More so, the distribution of informed and parental consent was sent through e-mail to the participants before the interview session and survey proper.

The key informants/respondents were informed that participation in the research study is voluntary and that they have the right to withdraw at any time or to refuse to participate wholly without harmful consequences. Anonymity and Confidentiality have also assured the reactions of the key informants/respondents.

Results

Table 4 Challenges Encountered by the HUMSS Learners of Holy Angel University S.Y. 2021-2022 in Terms of Self-regulation

Theme	Sub-themes
Self-management and control barriers	1. Time management 2. Adaptation to new school culture 3. Socialization crisis

The following sub-themes from the barriers are highlighted in the table above. theme about self-management and control

Table 5 Challenges Faced by the HUMSS Learners of Holy Angel University S.Y. 2021-2022 in Terms of Teacher Instructional Delivery

Theme	Sub-themes
Teachers' actions as hindrance to learning	1. Learners' engagement and interaction 2. Teachers' professionalism towards online learning instructions, delivery, and pedagogy 3. Feedbacking to learners' works and outputs

The following sub-themes from the to learning are highlighted in the table above. theme about teachers' actions as hindrance

Table 6 Challenges Faced by the HUMSS Learners of Holy Angel University S.Y. 2021-2022 in Terms of Assessments

Theme	Sub-themes
Problems of group-based online learning	Collaborative and cooperative learning-based activities

The following sub-theme from the online learning is highlighted in the table above. theme about the problems of group-based

Table 7 Challenges Faced by the HUMSS Learners of Holy Angel University S.Y. 2021-2022 in Terms of Modern-day Technologies

Theme	Sub-themes
Facing technological shortcomings	1. Malfunctions of hardware technologies 2. Outmoded devices 3. LMS connection and internal service error 4. Too many available LMS for e-teaching and learning processes 5. Technical glitching and lagging issues 6. Time limit and ranking system features 7. Discomfort with utilization of various video conferencing applications 8. Unsteady Wi-Fi connectivity 9. Mobile data lagging issues

The following sub-themes of the theme about the technological shortcomings faced by the SHS learners are highlighted in the table above.

Table 8 Coping Mechanisms Applied by the HUMSS Learners of Holy Angel University S.Y. 2021-2022 Regarding the Challenges Encountered to e-Learning Environment

Theme	Sub-themes
Implementation of effective coping mechanisms used by the SHS learners	1. To-do lists/write-away strategies 2. Family Support 3. Accountability partner/buddy 4. Self-motivation and open-mindedness 5. Relaxation and recreation 6. Self-discipline and goal-driven

The following sub-themes of the theme about the coping mechanisms applied by the SHS learners of Holy Angel University concerning the challenges encountered in e-learning environments are highlighted in the table above.

Table 9 Best Coping Mechanisms Applied by the HUMSS Learners of Holy Angel University S.Y. 2021-2022 Concerning to the Challenges Encountered to e-Learning Environment

Theme	Sub-themes
Effective self-planning	1. Calendar method 2. Adaptation to new normal education 3. Planning and organizing 4. Relaxation and self-motivation

The following sub-themes of the theme the SHS learners are highlighted in the table about the best coping mechanisms applied by above.

Table 10 Emerging Challenges Encountered by the Participants Concerning Self-Regulation

1. I did not achieve the objectives that I set for my learning.	2.47	Disagree
2. I cannot concentrate when having online classes compared to traditional classes.	2.97	Neutral
3. I have limited preparation before an online class.	3.00	Neutral
4. I have poor time management skills during online classes.	2.80	Neutral
5. I feel emotionally disconnected or isolated during online classes.	3.40	Agree
6. I feel disinterested during an online class.	2.73	Neutral
7. I experience financial challenges when purchasing and accessing e-learning resources.	2.43	Disagree
General Weighted Mean	2.83	Neutral
Standard Deviation	0.31	

Table 10 showed the responses of the participants about the challenges encountered in self-regulation. As can be seen in the table, the participants answered neutrally to the listed statement of challenges. This was

proved by the 2.83 general weighted mean. The 5th statement, “I feel emotionally disconnected or isolated during online classes”. Garnered the highest mean of 3.40 (agree).

Table 11 Emerging Challenges Encountered by the Participants Concerning Teacher Instructional Delivery

1. My teachers do not use methodologies that actively engage learners through the learning process.	1.83	Disagree
2. My teachers do not employ real-life examples during the online discussion as well as formulated explanations that allow me to appreciate the relevance of the subject taught.	1.53	Strongly Disagree
3. My teachers are not approachable when I have questions, concerns, and issues.	1.80	Disagree
4. My teachers do not portray professionalism.	1.57	Strongly Disagree
5. My teachers' level of knowledge does not contribute to my learning.	1.43	Strongly Disagree
General Weighted Mean	1.63	Strongly Disagree
Standard Deviation	0.16	

Table 11 displayed the responses of the participants concerning to the challenges encountered in teacher instructional delivery. As can be seen in the table, the participants answered strongly disagreed with the listed statement of challenges. This was proved by

the 1.63 general weighted mean. The 1st statement, “My teachers do not use methodologies that actively engage learners through the learning process”. Garnered the highest mean of 1.83 (disagree).

Table 12 Emerging Challenges Encountered by the Participants Concerning Assessments

1. The learning assessments for each part of the lesson were not clear, precise, and specific.	1.93	Disagree
2. The required activities, quizzes, and projects inaccurately measured my attainment of the learning outcomes.	2.33	Disagree
3. The time frame provided to finish the learning assessments is not enough.	2.77	Neutral
4. The learning assessments for student-to-student interaction are not articulate in the course subject.	2.27	Disagree

Table 12 Emerging Challenges Encountered by the Participants Concerning Assessments (Con.)

5. Instructional materials used in the learning assessments do not contribute to my learning.	1.73	Strongly Disagree
6. The learning assessments given are challenging in an e-Learning environment.	3.13	Neutral
General Weighted Mean	2.36	Disagree
Standard Deviation	0.47	

Table 12 labeled the responses of the participants about their challenges encountered in assessments. As can be seen in the table, the participants who answered disagreed with the listed statement of challenges. This was

proved by the 2.36 general weighted mean. The 6th statement “The learning assessments given are challenging in an e-learning environment”. Garnered the highest mean of 3.13 (neutral).

Table 13 Emerging Challenges Encountered by the Participants Concerning Modern-Day Technologies

T	1. I do not have enough necessary technological tools and equipment that I can use for e-learning.	1.57	Strongly Disagree
H	2. I am not satisfied with the opportunities to use hardware technologies provided by the institution.	2.20	Disagree
L	3. I have not received help or assistance with problems related to my LMS accounts.	1.63	Strongly Disagree
L	4. The institutions’ Learning Management Systems do not work properly.	2.03	Disagree
L	5. I have difficulties understanding or navigating new Learning Management Systems.	2.10	Disagree
H	6. I experience disparities concerning access to and use of modern-day technologies (hardware) during online classes due to unstable socioeconomic and physical conditions.	2.60	Neutral
H	7. I have outdated hardware technologies.	2.03	Disagree

Table 13 Emerging Challenges Encountered by the Participants Concerning Modern-Day Technologies (Cont.)

I	8. I experience technical difficulties in completing my learning tasks and assignments due to the unstable Wi-Fi connection.	3.33	Neutral
T	9. I have insufficient access to e-library resources.	3.10	Neutral
T	10. I have limited access to learning modules, e-worksheet, and learning packets for my learning.	2.20	Disagree
I	11. I have an unstable Wi-Fi internet connection at home.	2.93	Neutral
I	12. I do not have Internet access during online classes.	1.43	Strongly Disagree
General Weighted Mean		2.26	Disagree
Standard Deviation		0.59	

Legends:

H-Hardware

L-Learning Management Systems

T-Technological Tools and

Application

I-Internet

Table 13 revealed the responses of the participants in relation to the challenges encountered with modern-day technologies.

As can be seen in the table, the participants answered disagreed with the listed statement of challenges. This was proved by the 2.26 general weighted mean. The 8th statement “I experience technical difficulties in completing my learning tasks and assignments due to the unstable Wi-Fi connection”. Garnered the highest mean of 3.33 (neutral).

Table 14 Coping Mechanisms Applied by the Participants Concerning e-Learning Environment (Learner Factors)

Learner Factors	Frequency	Percentage (%)
Concentration and focus	24	12.12
Goal setting	23	11.62
Motivation	23	11.62
Reflection, relaxation, and recreation	23	11.62
Self-discipline	22	11.11
Time-management	21	10.61

Table 14 Coping Mechanisms Applied by the Participants Concerning e-Learning Environment (Learner Factors) (Cont.)

Learner Factors	Frequency	Percentage (%)
Adaptation and innovation	18	9.09
Optimism	12	6.06
Peer learning and support	12	6.06
Family support	10	5.05
Psychological support	8	4.04
Others	2	1.01
Total	198	100

Reflected in table 14 were the coping mechanisms applied by the participants concerning the e-Learning environment (learner factors). As can be seen in the table, concentration and focus garnered the highest frequency of 24 (12.12%).

Table 15 Coping Mechanisms Applied by the Participants Concerning e-Learning Environment (Teacher Factors)

Teacher Factors	Frequency	Percentage (%)
Self-discipline	19	12.03
Concentration and focus	18	11.39
Time-management	18	11.39
Adaptation and innovation	17	10.76
Motivation	16	10.13
Peer learning and support	15	9.49
Goal setting	13	8.23
Reflection, relaxation, and recreation	13	8.23
Optimism	10	6.33
Psychological support	10	6.33
Family support	9	5.70
Others	0	0.00
Total	158	100

Reflected in table 15 were the coping mechanisms applied by the participants concerning the e-learning environment

(teacher factors). As can be seen in the table, self-discipline garnered the highest frequency of 19 (12.03%).

Table 16 Coping Mechanisms Applied by the Participants Concerning e-Learning Environment (Assessment Factors)

Assessment Factors	Frequency	Percentage (%)
Concentration and focus	26	14.77
Goal setting	22	12.50
Time-management	21	11.93
Adaptation and innovation	19	10.80
Motivation	18	10.23
Self-discipline	18	10.23
Peer learning and support	15	8.52
Reflection, relaxation, and recreation	15	8.52
Optimism	8	4.55
Family support	7	3.98
Psychological support	7	3.98
Others	0	0.00
Total	176	100

Reflected in table 16 were the coping mechanisms applied by the participants concerning the e-Learning environment

(assessment factors). As can be seen in the table, concentration and focus garnered the highest frequency of 26 (14.77%).

Table 17 Coping Mechanisms Applied by the Participants Concerning e-Learning Environment (Technological Factors)

Technological Factors	Frequency	Percentage (%)
Adaptation and innovation	20	15.27
Family support	17	12.98
Time-management	16	12.21
Concentration and focus	13	9.92

Table 17 Coping Mechanisms Applied by the Participants Concerning e-Learning Environment (Technological Factors) (Cont.)

Technological Factors	Frequency	Percentage (%)
Peer learning and support	12	9.16
Self-discipline	12	9.16
Reflection, relaxation, and recreation	11	8.40
Optimism	10	7.63
Motivation	9	6.87
Goal setting	7	5.34
Psychological support	4	3.05
Others	0	0.00
Total	131	100

Reflected in table 17 were the coping mechanisms applied by the participants concerning the e-learning environment (technological factors). As can be seen in the table, adaptation and innovation garnered the highest frequency of 20 (15.27%).

Discussion

Challenges Encountered to e-Learning Environment (Self-Regulation)

It is evident that majority of the participants had limited preparation before an online class started because they were emotionally alienated or isolated amidst online distance learning as reflected in the quantitative results.

These findings affirmed the analysis of Baltà-Salvador (2021) that online distance learning has triggered the feeling of disconnection and isolation of learners because they remain locked in their homes and not seeing their

co-learners as well as teachers. Therefore, it will be crucial for them to have emotionally detached during annlyne class.

Challenges Encountered to e-Learning Environment (Teacher Instructional Delivery)

Teachers' professionalism toward online learning instruction and delivery were some of the considerations that need to be contemplated. Although the overall interpretation in the quantitative analysis about this aspect has disagreed, it might be a good start for teachers to create an e-classroom that is more engaging, conducive, and positive space.

These findings affirmed the explanation of Gayton and McEwen (2007) when teacher-to-learner engagement is not evident, learning would be boring and irrelevant, especially in online distance learning. Using various communication channels is important for a learner to engage in the subject course.

Challenges Encountered to e-Learning Environment (Assessments)

Participants' responses highlighted the overall challenges concerning learning assessments in their e-learning environment which ironically the results were problems with group and collaborative online activities that had helped them to foster social and interpersonal skills, but still, they felt isolated and emotionally detached concerning their online distance education journey.

These findings were in support of Hannafin et al. (2003) who noted that web-based activities render difficulty in the aspect of observational and participatory assessments due to the absence of face-to-face interaction.

Challenges Encountered in e-Learning Environment (Modern-Day Technologies-Hardware)

Overall, in terms of hardware technologies, there were two major circumstances faced by the learners such as malfunctions of hardware technologies and outmoded devices.

Participants experienced social inequalities and physical differences in utilization and access to hardware technologies during online distance learning. It is noticeable that some of them have outdated/old model devices for online learning as well as encountered malfunctioning devices with which they felt frustrated.

These findings affirmed the analysis of Ibrahim et al. (2016) that with the absence of appropriate and updated equipment as

well as easy access to it, the implementation of e-learning will be difficult and not manageable. More so, it can be observed that hardware technologies are considered a vital factor among the technological aspects of the e-Learning environment which determine the overall readiness of individuals to adopt new normal education by having available hardware technologies to successfully carry out learning.

Challenges Encountered to e-Learning Environment (Modern-Day Technologies-LMS)

In the aspects of learning management systems, there were struggles and shortcomings when referring to internal service errors of some LMS that the HAU-Basic Education Department utilized. These include errors in Orange Apps, Canvas LMS, and MS Teams. Grade 11 HUMSS learners found it more difficult and frustrating when there were multiple LMS used in classes. As a result, they found this time-consuming and stressful which hindered them to work efficiently and productively.

The quantitative results reflected that the majority of the participants disagreed concerning their difficulties in navigating as well as understanding new learning management systems at HAU specifically: OrangeApps, MS Teams, and Canvas LMS. This means that the interpretation from qualitative analysis signified that since the respondents were digital natives, they only felt frustration and they thought that it is non-essential to use three (3) LMSs in their e-Learning

environment. It does not mean they cannot utilize and know how to use them but because it was time-consuming and resulting mismanagement and confusion.

As specified by Sharma (2015), Learning Management Systems (LMS) are used to help learners to access various educational courses. It also aims to improve and increase learning delivery in online education. It is used for overall intellectual development and skills.

In contrast, according to D'Angelo (2018), using different digital platforms and tools, such as LMS, can create confusion, increase failures in terms of completing tasks, and be time-consuming in exploring their technical features.

Challenges Encountered to e-Learning Environment (Modern-Day Technologies-Technological Tools And Application)

In general, the Grade 11 HUMSS learners of HAU during the School Year 2021-2022 experienced technical and lagging issues on their video-conferencing applications (Zoom, MS Teams, Google Meet) same with online quiz/interactive games applications (Kahoot, Mentimeter, Quizlet). More so, discomfort concerning the utilization of different video conferencing applications was also evident wherein the learners need more file space and high-end gadgets to accommodate all applications. Also, ranking system features and time limits gave the learners frustration and low self-esteem that eradicating the purpose of the applications which is to provide meaningful learning experiences.

It is also reflected that participants encountered disparities in socioeconomic and physical conditions concerning hardware technologies. Insufficient access to e-library resources might be a factor in their e-learning environment. This will be an essential point on why they might have limited knowledge and access to various e-library resources of HAU. Technical glitching, lagging issues, and discomfort with the utilization of various applications were the possible and valid reasons why they might not use the e-library resources of the school and chose google scholar as the top search engine app in the world.

These findings affirmed the explanation of Akpinar and Kadir (2018) that learning with the use of mobile applications, tools, and resources could improve the intellectual attainment and attitude of learners, however, accessibility, not easy navigating, and technical problems are still hindrances for learners to achieve the importance and goal of using technological tools and application.

Challenges Encountered in e-Learning Environment (Modern-Day Technologies-Internet)

Instability and technical shortcomings concerning the Wi-Fi internet were major factors to the participants resulting in inefficiency concerning their submission of learning activities on time likewise in their projects and performance tasks.

These findings affirmed the analysis of Schumacher and Kent (2020) that in the Philippines, 86% of learners nationwide use

the Internet amidst new normal education, on the other hand, 61% strongly agreed that they experienced unstable internet connection whereas there were some, while having online classes utilized various websites to answer their modules.

Coping Mechanisms Applied to the e-Learning Environment

As a generalization, the learners of Grade 11 HUMSS at Holy Angel University applied some best and most efficient coping mechanisms to surpass the challenges given to their e-Learning environment during the School Year 2021-2022. To be more specific, making time with friends, families, and self through recreation and relaxation; planning and organizing to facilitate management between academic, personal, and non-academic matters; self-motivation to maintain healthy physical and mental health; and calendar method to have a summary of activities to avoid procrastination and overwork. With all the stated best coping mechanisms above, this reflects effective self-planning.

Conclusions

Based on qualitative data analysis, there were four themes that appeared in the challenges encountered by the learner participants. These themes were as follows: 1) Self-management and control barriers, 2) Teachers' actions as a hindrance to learning, 3) Problems of group-based online learning, and 4) Facing technological shortcomings.

Furthermore, there were two themes that surfaced in the coping mechanisms of

the learner participants. These themes were as follows: 1) Implementation of effective coping mechanisms used by the SHS learners and 2) Effective self-planning.

Based on quantitative data analysis, feeling emotionally disconnected or isolated amidst online distance learning was among the top answer of the learner participants in terms of self-regulation.

In the aspect of teacher instructional delivery, the top answer was the use of appropriate teaching methodologies and active engagement through the teaching-learning process. Although it resulted disagreed, it might be a good opportunity and a reflection for teachers to more engage the learners during discussions.

Learner participants thought that learning assessments in virtual learning were challenging to them as the top answer under the aspect of assessments which gave them frustrations, especially in collaborative-based activities.

More so, they experienced a sense of disparities concerning access and utilization of hardware technologies due to physical and socio-economic conditions that hindered successful learning.

In terms of learning management systems, the top answer was they faced difficulties in navigating and understanding new LMS. Although it has resulted in disagreeing manner, still they might feel frustrated since they have at least three (3) LMS to understand and use.

Insufficient access to e-library resources

and disparities concerning access and use of e-technologies were the top answers in the aspect of technological tools and applications that signified an essential point why they have little to no knowledge of the various e-library resources. Moreover, lagging issues and discomfort with the use of various technological applications were the reasons why they do not prefer to use HAU e-library resources. It was also reflected that there were lagging issues with video-conferencing applications and online interactive games.

Concentration and focus; time management; and adaptation and innovation were among the top coping mechanisms applied by the participants to their e-learning environment during the S.Y. 2021-2022.

Lastly, premised on the findings, it was concluded that there was a felt need for an Online Instructional Framework in the Humanities and Social Sciences Strand (HUMSS).

Recommendations

These recommendations were formulated by the researcher based on the results, findings, and conclusions:

1) strengthening the *kumustahan* sessions, 2) professional growth for teachers concerning 21st-century education, 3) systematized peer evaluation, 4) extending the programs related to scholarships and grants,

5) systematized the use of one LMS and one video-conferencing application, 6) strengthening the promotion of e-library resources, 7) The creation of Wi-Fi primer, 8) The implementation of accountability buddy to learners, 9) an Online Instructional Framework for Humanities and Social Sciences Strand (HUMSS) should be provided to learners so that their encountered challenges self-regulation; teacher instructional delivery; assessments; and modern-day technologies, could be addressed properly, and 10) testing the validity and reliability of the Online Instructional Framework to other SHS strands such as Accountancy, Business Management (ABM); Science, Technology, Engineering, and Mathematics (STEM); General Academic Strand (GAS); and Technical-Vocational and Livelihood (TVL).

The researcher recommends to similar research study to describe and analyze the struggles and coping mechanisms of SHS HUMSS learners during the School Year 2021-2022 concerning the e-learning environment, particularly in self-regulation, teacher instructional delivery, assessments, and modern-day technologies. More so, the researcher suggests to future researchers use this research as their reference in case their study is similar and or related to it. They can also modify the research design, research locale, number of participants, and elements of the e-learning environment.

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