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Mindful Self-Care Behaviors: Basis in the Development of a Mindful Self-Care Program for College Students

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Abstract

The primary purpose of this study is to determine the mindful self-care behaviors among students in a local university so that a mindful self-care program tailored to its students can be developed appropriately. The study's respondents were composed of college students from one local university college. The respondents were asked to answer the Mindful Self-Care Scale by Catherine Cook-Cottone, 2018. The questionnaire measured the mindful self-care behaviors of the students. The researcher used statistical tools such as weighted mean and standard deviation to ensure impartiality in the data presentation, analysis, and interpretation. It was concluded that physical care is the least practiced dimension of mindful self-care. The reason for this could be related to the current activities that students are involved in, which are mostly done online. Furthermore, nutrition is a source of concern, owing to the abundance of more convenient and easy-to-prepare meal options, such as fast food and junk food. Ultimately, although most of the dimensions received relatively high scores, the proposed mindful self-care program includes all the components of mindful self-care, with a focus on mind/body exercises, physical activities, and nutrition.

Keywords: mindful self-care, self-care, mindful self-care program, program development

Introduction

The pandemic highlights the country's scarcity of guidance counselors, especially since the demand for professional mental health services has increased in recent years. In a report by the Department of Education (DepEd), psychosocial problems have emerged among students because of the

changes brought about by the pandemic (Aguilar, 2020). Unfortunately, with only about 1,200 active counselors in the country, meeting the counseling needs of each student is nearly impossible (Magsambol, 2020). As a result, utilizing self-care-based programs and self-care-focused webinars as an intervention to address mental health concerns has grown significantly, as one-on-one counseling is impractical in catering to students' needs on a massive scale.

Self-care, as explained by (Baratta, 2018), is the proactive taking of time to pay attention to oneself. It entails planning one's daily activities, relationships, and surroundings, which are frequently discussed in self-care webinars and programs across the country. This direction is potentially strengthened by the notion that self-care behaviors and practices are useful in addressing a range of different concerns. As reviewed by (D'Souza, 2021), several studies on self-care have shown favorable impacts, while only a few studies have demonstrated no influence at all. However, as has been noticed, most webinars and self-care programs held in the country lack a defined structure. For instance, one school's self-care programs might concentrate on improving participants' self-esteem by providing numerous webinars regarding it, whereas another might simply provide a period for students to take a break from academic obligations. As a result of the lack of a uniform program among institutions, concluding its effectiveness on a broad scale is difficult, thus a defined and structured self-care program would be ideal to address this concern.

Established the concept of mindful self-care, which may be used as a foundation for developing self-care programs. It's a six-dimensional approach to self-care that emphasizes mindful relaxation, physical care, self-compassion and purpose, supportive relationships, supportive structure, and mindful awareness. These dimensions are seen to be good predictors of good mental health and markers of self-care behaviors. Thus,

these dimensions should be incorporated as essential components of a self-care program for institutions.

In the case of the study's chosen locale, there is a lack of staffing in the guidance and counseling office. Only six counselors are assigned and perform counseling services to thousands of students. Moreover, the counselors are also given administrative tasks which adversely affects their main tasks as counselors. Furthermore, there is an existing support program for students, but it is not regarded as a structured self-care program. Therefore, developing a structured mindful self-care program to address the various elements of self-care, as mentioned in the study (C.P., 2015) should be considered. Furthermore, a well-structured program allows for effective evaluation. The study's goal is to determine the profile of mindful self-care behaviors among students in the chosen locale so that a mindful self-care program tailored to the local population can be developed appropriately. Also, it attempts to fill a gap in the country's limited published studies on self-care and mindful self-care.

Methodology

A quantitative approach was used in this study, which emphasizes dimensions, statistical descriptions, and generalizability (Leavy, 2017). Particularly the descriptive survey research design was used to describe and interpret the mindful self-care behaviors of the respondents. For the survey to be both trustworthy and valid, the questions had to be carefully planned, well-written, clear, and simple to comprehend. The results from this study provided a better understanding of the mindful self-care behaviors of the respondents, which is essential for the development of a mindful self-care program designed for college students.

The respondents of the study were college students presently enrolled in one college of a local university in Muntinlupa City. Furthermore, data from the respondents were gathered using stratified random sampling. It's a random sampling approach in which a population is first divided into smaller subgroups, or strata, based on shared features of the members, and then randomly select from these strata to generate the final sample (Simkus, 2020). In this study, the respondents were grouped according to the program they are enrolled in. They were proportionally distributed to ensure stratum generalizability. Respondents were systematically selected prior to the survey and contacted via their institutional email for screening and distribution of informed consent forms.

The research involved 330 college students presently enrolled in one college of a local university in Muntinlupa City: 119 from the BS Psychology program, 75 from the AB Political Science program, and 136 from the AB Communication program. The Mindful Self-Care Scale, a 33-item scale that measures the self-reported frequency of behaviors that measure self-care behavior was the instrument used in this study. The scale addresses mindful relaxation, physical care, self-compassion, and purpose, supporting relationships, supportive structure, and mindful awareness. The items' responses are on a 5-point Likert scale, ranging from 1 (Never or 0 days) to 5 (Regularly or 6 to 7 days). The responses to all items will be totaled, with higher scores indicating a higher frequency of self-care behaviors. The total and subscales of the MSCS have high internal consistency reliability. Cronbach's coefficient for the entire 33-item MSCS was 0.89. PC (0.89), SR (0.86), mindful self-awareness (0.92), self-compassion and purpose (0.83), MR (0.77), and SS were the subscales with the highest alpha (0.77). The MSCS demonstrated construct validity as well (Cook-Cottone C. P., 2018)

To ensure that the instrument is applicable to the study's identified respondents, qualitative validation and test-retest

reliability testing were performed. The pre-test was given to twenty non-participant students to obtain their initial scores and to determine language suitability and ease of following directions from their perspective. All of the participants reported that they had a very clear understanding of each item and that they had no difficulty answering the questionnaire. They took the same test again after one week to obtain their retest scores, which were used to establish test-retest reliability. After correlating the total scores from the first and second administrations of MSCS, an r -value of 0.901 with a p -value of <0.001 was obtained. Additionally, optimal values were obtained for each subscale (Mindful Relaxation: $r = 0.846$, $p = <0.001$; Physical Care: $r = 0.713$, $p = <0.001$; Self-Compassion and Purpose: $r = 0.767$, $p = <0.001$; Supportive Relationships: $r = 0.752$, $p = <0.001$; Supportive Structure: $r = 0.901$, $p = <0.001$; and Mindful Awareness: $r = 0.891$, $p = <0.001$) With these data, it is reasonable to conclude that MSCS is appropriate for measuring the mindful self-care behaviors of the present study's identified respondents.

Data for the research was gathered through an online scale. First, the respondents were informed about the research process. Prior to participating in the study, respondents were given an informed consent form, which they duly signed. Afterward, the respondents were given a link that directed them to the electronic questionnaire (Google Form). The data from the participants were stored in a secure and private drive and folder, which was categorized, tabulated, analyzed, and evaluated after gathering it.

Throughout the process of this research, ethical considerations were strictly observed and adhered. Foremost, there was no harm done to the respondents in any manner. Second, the dignity of research respondents was always respected. Prior to the data-gathering procedure, full informed consent forms were given to the respondents. Moreover, the research data were kept private and confidential. The respondents' anonymity was ensured, and they were given the option of withdrawing from the

research at any point. If necessary, debriefing was provided to the respondents. Ultimately, the current study was subjected to Ethical Review Committee (ERC) approval to ensure that no ethical violations are committed while the study is being completed.

Results and Discussion

Problem 1. What are the mindful self-care behaviors of students in terms of (1.1) mindful relaxation; (1.2) physical care; (1.3) self-compassion and purpose; (1.4) supportive relationships; (1.5) supportive structure; (1.6) mindful awareness?

Table 1

Mean, and SD scores of Mindful Self-care Behaviors in terms of mindful relaxation of students as measured by the Mindful Self-care Scale

MINDFUL RELAXATION	M	SD	Interpretation
1. I did something intellectual (using my mind) to help me relax (e.g., read a book, or wrote)	3.51	1.04	High
2. I did something interpersonal to relax (e.g., connected with friends)	3.93	1.03	High
3. I did something creative to relax (e.g., drew, played an instrument, wrote creatively, sang, and organized)	3.57	1.11	High

4. I listened to relax (e.g., to music, a podcast, radio show, rainforest sounds)	4.36	0.94	Very High
5. I sought out images to relax (e.g., art, film, window shopping, nature)	3.71	1.09	High
6. I sought out smells to relax (lotions, nature, candles/incense, smells of baking)	2.76	1.27	Average
Overall	3.64	0.66	High

Table 1 shows the mean and standard deviation of the mindful self-care behaviors in terms of mindful relaxation based on the completed questionnaire. The mean score achieved for mindful relaxation is 3.64, indicating high levels of mindful relaxation behavior. Furthermore, the standard deviation was 0.66, indicating that almost all respondents scored close to the mean, with few reporting high or low levels of mindful relaxation behavior. This data revealed that college students frequently incorporate mindful relaxation activities into their daily lives. Nevertheless, continuous and more structured mindful relaxation interventions would be beneficial in maintaining or increasing this level even further. According to a recent study, students who received mindfulness-based relaxation interventions had larger decreases and overall lower stress levels, as well as larger increases and overall higher levels of resilience and self-efficacy (Vidic, 2019). As a result, using mindfulness-based relaxation interventions have the potential to significantly improve students' overall well-being.

Table 2

Mean, and SD scores of Mindful Self-care Behaviors in terms of physical care of students as measured by the Mindful Self-care Scale

PHYSICAL CARE	M	SD	Interpretation
1. I drank at least 6 to 8 cups of water.	3.83	1.00	High
2. I ate a variety of nutritious foods (e.g., vegetables, protein, fruits, and grains)	3.62	0.99	High
3. I planned my meals and snacks.	2.38	1.27	Average
4. I exercised for at least 30 to 60 minutes	2.21	1.13	Low
5. I took part in sports, dance, or other scheduled physical	2.08	1.21	Low
6. I did sedentary activities instead of exercising (e.g., watched TV, and worked on the computer) *Reversed	3.41	1.36	Low
7. I planned/scheduled my exercise for the day.	2.09	1.18	Low
8. I practiced yoga or another mind/body practice (e.g., Tae Kwon Do, Tai Chi)	1.55	0.87	Very Low
Overall	2.65	0.68	Average

The mean score obtained for physical care is 2.65, with a standard deviation of 0.68, indicating an average level of physical care behavior among the respondents. In comparison to other dimensions of mindful self-care, this data shows that college students place the least emphasis on taking care of themselves physically. This finding concurs with a recent study by (Sarangi, 2022), which found that as students' education levels

increased, they spent more time on sedentary and eat-sleep activities and less time on physical activities. The findings are concerning because a recent study found that insufficient physical activity was significantly associated with depressive and anxiety symptoms (Huang, 2022) and (Fang-Fang Zhao, 2022). In addition to decreased physical activity, unhealthy eating habits are becoming more prevalent in recent days. A study of university students who had been socially isolated at home for at least two months revealed that a high percentage of them were pre-obese/obese during the pandemic period. Furthermore, the percentage of the increase in consumption of sweets and sugary foods was high (Ayyıldız, 2022). Stress management, financial difficulties, and abrupt schedule changes may have contributed to these unhealthy eating patterns (Simone, 2021). . To address these concerns and achieve balanced well-being among students, more emphasis should be placed on programs that increase mindful physical care activities.

Table 3
 Mean, and SD scores of Mindful Self-care Behaviors in terms of self-compassion and purpose of students as measured by the Mindful Self-care Scale

SELF-COMPASSION AND PURPOSE	M	SD	Interpretation
1. I kindly acknowledged my own challenges and difficulties	4.24	0.75	Very High
2. I engaged in supportive and comforting self-talk (e.g., "My effort is valuable and meaningful")	3.84	1.08	High

3. I reminded myself that failure and challenges are part of the human experience.	4.25	0.88	Very High
4. I gave myself permission to feel my feelings (e.g., allowed myself to cry)	4.31	0.99	Very High
5. I experienced meaning and/or a larger purpose in my work/school life (e.g., for a cause)	3.83	1.01	High
6. I experienced meaning and/or a larger purpose in my private/personal life (e.g., for a cause)	3.89	1.05	High
Overall	4.06	0.73	High

For self-compassion and purpose, the acquired mean score is 4.06, and the standard deviation of 0.73. It indicates a high-level self-care behavior in terms of self-compassion and purpose. This data suggests that acknowledging one's vulnerabilities and giving meaning to one's self-care activities are important to respondents. However, just as with mindful relaxation, further improvement through a structured program is necessary to guarantee that this level is maintained or even strengthened. Especially given that there is already evidence that self-compassion promotes the reduction of depressive symptoms by enhancing resilience and optimism and decreasing perceived stress. These findings imply that programs that simultaneously promote students' self-compassion, resilience, and optimism can help reduce depressive symptoms and improve mental health in schools (Zhao, Yang, Ma, & Qin (2022).

Table 4

Mean, and SD scores of Mindful Self-care Behaviors in terms of supportive relationships of students as measured by the Mindful Self-care Scale

SUPPORTIVE RELATIONSHIPS	M	SD	Interpretation
1. I spent time with people who are good to me (e.g., support, encourage, and believe in me)	4.14	0.98	High
2. I scheduled/planned time to be with people who are special to me	3.74	1.18	High
3. I felt supported by people in my life	3.71	1.04	High
4. I felt confident that people in my life would respect my choice if I said "no"	3.63	1.16	High
5. I felt that I had someone who would listen to me if I became upset (e.g., a friend, counselor, group)	3.82	1.22	High
Overall	3.81	0.87	High

Correspondingly, the mean score obtained for supportive relationships is 3.81, with a standard deviation of 0.87, showing a high level of mindful self-care behavior in terms of supportive relationships. This data reveals the significance of having supportive and encouraging people as a critical aspect of self-care is highly emphasized by the respondents. The results reflect a recent study that found that social support is adversely connected to student loneliness and positively related to student coping mechanisms. The availability of support from friends and significant others may reduce loneliness (Hussin, 2021). As a response, establishing supportive relationships as part of a mindful self-care program is critical to strengthening wellness.

Table 5

Mean, and SD scores of Mindful Self-care Behaviors in terms of supportive structure of students as measured by the Mindful Self-care Scale

SUPPORTIVE STRUCTURE	M	SD	Interpretation
1. I maintained a manageable schedule	3.41	0.98	High
2. I kept my work/schoolwork area organized to support my work/school tasks	3.68	0.99	High
3. I maintained a balance between the demands of others and what is important to me	3.77	0.93	High
4. I maintained a comforting and pleasing living environment	3.66	0.96	High
Overall	3.63	0.76	High

Furthermore, the obtained mean score for the supportive structure is 3.63 with a standard deviation of 0.76. Although it is interpreted as high, it is nevertheless a source of concern because it is one of the mindful self-care dimensions with a low score when compared to others. This demonstrates that students exercised manageable and organized structure as part of self-care, but it may still be improved with a more structured program that provides a more supportive structure. According to (Sander, 2019), cluttered and unorganized spaces can negatively impact a person's stress and anxiety levels, as well

as his or her ability to focus, eat, and sleep. This aspect should certainly be prioritized in a mindful self-care program for college students, as these individuals are prone to disorganization as a result of the demands they must meet at school.

Table 6

Mean, and SD scores of Mindful Self-care Behaviors in terms of mindful awareness of students as measured by the Mindful Self-care Scale

MINDFUL AWARENESS	M	SD	Interpretation
1. I had a calm awareness of my thoughts	3.51	1.03	High
2. I had a calm awareness of my feelings	3.60	0.96	High
3. I had a calm awareness of my body	3.54	0.96	High
4. I carefully selected which of my thoughts and feelings I used to guide my actions	3.87	0.97	High
Overall	3.63	0.85	High

Finally, the acquired mean score for mindful awareness is 3.63 with a standard deviation of 0.85. It indicates a high level of self-care behavior in terms of mindful awareness. Although it is interpreted as high-level, it is one of the dimensions with the lowest mean score among all dimensions, similar to the supportive structure and physical care. One possible explanation for why it is one of the dimensions with the lowest average score is the availability of mindfulness exercises and activities to students. Consequently, it will be one of the primary areas to be addressed in the mindful self-care program, particularly since a recent study found that mindfulness skill training resulted in significant reductions in perceived stress levels and procrastination (Gray, 2021).

Problem 2. Based on the findings of the study, what proposed mindful self-care programs for the students can be developed?

Based on the gathered data, the proposed program should focus on the following areas: (1) the practice of mind/body exercises, (2) physical activities, and (3) nutrition. Interestingly, all of these are included in the physical care dimension of mindful self-care. Contrary to popular belief, the study's findings revealed that self-care is really all about self, not just mental health; and by "self," we mean all aspects of our lives. The proposed program's first area of focus is the practice of mind and body exercises, and yoga is one of the activities which can be used. Yoga in the school setting is a collection of mind-body practices that promote well-being and student engagement, including postures, breathing, relaxation, and meditation. Additionally, it helps students develop and practice a set of mind-body tools that support well-being (such as stress management, self-regulation, and improved health) so that they are ready to participate in classroom learning (Cook-Cottone C. , *Mindfulness and Yoga in Schools: A Guide for Teachers and Practitioners*, 2017). Yoga programs, as suggested by (Childress, 2015), should be integrated into the school day to have significant impacts, and provide access to most students. This can be accomplished through a combination of formal and informal practices blended into the classroom setting, as well as by offering separate yoga classes. Given these points, one of the elements of the proposed mindful self-care program is a structured yoga program, which consists of various yoga activities designed to improve students' practice of mind and body exercises. Furthermore, the second area of concern to be addressed is physical activities. Currently, the university has a program that promotes physical wellness among employees and students. There is a Zumba session every day at 4 p.m. from Monday to Friday. However, due to the conflict with their class schedules, very few students attend the said sessions. To address this, the proposed Mindful Self-Care Program will adapt

a method called Comprehensive School Physical Activity Program (CSPAP). It is a well-known method of promoting students to participate in physical activities at school during school hours, during their free time, or before and after school (Comprehensive School Physical Activity Programs: A Guide for Schools, 2013). With this, the promotion of physical wellness at the university will vary in nature and be offered with flexibility, rather than being done exclusively in a similar manner every now and then. Consequently, nutrition is also an issue that must be addressed. As previously stated in this paper, unhealthy eating habits are becoming more common today. Furthermore, simply eating nutritious food is not a direct solution to this problem. Meal planning is necessary to ensure that a person's nutritional needs are met (C.P., 2015). According to Abraham, Noriega, and Shin (Abraham, 2018) college students prioritize food convenience and taste over nutritional value, and it was recommended that providing health and nutrition courses, as well as using technology to educate these young individuals, could be effective ways to address this problem. Considering this recommendation, a health education program will be integrated into the proposed mindful self-care program and delivered through a series of webinars and a mobile application to assist students in meal planning on a daily basis and to ensure that they have constant access to proper nutrition education. The findings indicate that a structured mindful self-care program is needed to address the weakest area of students' self-care behaviors. Although other dimensions received relatively high scores, it will be included and addressed in the proposed mindful self-care program to sustain and even improve it among students. The program will be called Ako MUNa: A Proposed Mindful Self-Care Program for College Students. The name Ako MUNa is derived from the Tagalog words "ako" (self) and "MUNa" (first or priority). The letters M, U, and N are intentionally capitalized to reflect the name of the local university, which is situated in the City of Muntinlupa. It will include activities and programs that address the six dimensions

of mindful self-care: mindful relaxation, physical care, self-compassion and purpose, supportive relationship, supportive structure, and mindful awareness. However, it will place a greater emphasis on three key issues: (1) the practice of mind/body exercises, (2) physical activities, and (3) nutrition.

Ako Muna: A Proposed Mindful Self-Care Program for College Students

Objectives:

- Improve students' mindful self-care behaviors, particularly in (1) the practice of mind/body exercises, (2) physical activities, and (3) nutrition.
- Improve students' practice of mind-body exercises with a structured yoga program that includes a variety of yoga activities tailored to college students. Furthermore, it will allow for the promotion of mindful awareness among students, which will aid them in avoiding being overwhelmed by stressful events.
- Increase students' physical activity by providing a physical health lecture program, a regular exercise program, and a health monitoring application.
- Develop students' knowledge of healthy eating habits and the importance of nutrition by providing various nutrition education webinars and a mobile application that will assist them in meal planning and providing information about proper nutrition.

Components of the Program

The following components will be used to increase college students' mindful self-care behaviors, specifically the practice of mind and body exercises, physical activities, and nutrition.

1. taYO GALaw: School-based Yoga Program. An intervention designed to help students develop the practice of mind and body exercises. Yoga in schools helps students develop and practice a set of mind-body tools that support well-being (Cook-Cottone C. , Mindfulness and yoga for embodied self-regulation: A primer for mental health professionals. New York,, 2015).
 - a. Yoga Breaks – Yoga breaks, according to Asencia, are 5-to-10- minute breaks between academic tasks that allow students to assimilate knowledge, build a positive mood state, and support physical health. Include breathing breaks in which you lead students through one of the breathing exercises, pausing to coordinate breath with movement (as cited in Cook-Cottone, 2017).
 - b. Yoga Fridays – Every Friday, there will be organized yoga sessions for students, which will include physical postures, breathing exercises, relaxation, and meditation.
 - c. Virtual Yoga Sessions – Students who want to practice yoga at home could use Ako MUNa Mobile Application to access synchronous and asynchronous yoga sessions.
2. Comprehensive School Physical Activity Program (CSPAP). Pamantasan is currently holding daily Zumba sessions at 4:00 p.m. for on-site employees and students. A proposed integrated Zumba session to be delivered online shall be implemented to include students who are currently enrolled in the online

modality. Walking, aerobics, etc. will also be included as additional physical activities.

3. Nutrition Education Program. An intervention designed to help students develop healthy eating habits, such as eating more nutritious and balanced meals.
4. Health Education Webinars – It aims to increase students' knowledge of proper nutrition for them to develop healthy eating habits.
5. Ako MUNa Mobile Application. As previously stated in this paper, self-care is a form of therapy that can be performed by individuals on their own or with the assistance of a practitioner or educational resources (Evans, 2020). With this, a mobile application designed to develop mindful self-care behaviors will be launched alongside the other programs to ensure that students are consistently performing mindful self-care practices.

Recommendations

After drawing the conclusions of the study, the researcher hereby recommends:

- The implementation of the Ako MUNa: Mindful Self-care Program to a specific college and other colleges for evaluation and validation of its effectiveness in addressing the key issues related to mindful self-care behaviors.
- Development of the Ako MUNa Mobile Application to ensure that students have access to various psycho-educational materials about self-care as well as access to university-provided psychosocial support. Furthermore, having a convenient mobile application may encourage students to consistently engage in mindful self-care practices.
- Participation and support from school administrators as well as other stakeholders to guarantee the full implementation of the mindful self-care program.

- Utilize this study as a guideline for future research. Perhaps, the proposed mindful self-care program could yet be improved to meet the demands and gaps discovered in future studies. This research could also serve as a foundation for future studies related to self-care, mindful self-care, and mindfulness.

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MBA Students' Preference: Online versus Face to Face Learning

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Abstract

The onset of Covid-19 pandemic has compelled higher education institution to adapt with the use of information and communication technology to seamlessly engage with their student as a modality of learning and instruction. As all educational institution needs to close, all face-to-face lessons were cancelled, compelling many institutions, including our own university, to immediately transition from face-to-face in-person learning to completely online lessons. The abrupt switch to fully online learning has been particularly stressful for many instructors and students who prefer in-person instruction. From this premise, the University of Muntinlupa MBA program are making a transitional move in the modality of instructions from the blended learning approach to the limited in-person teaching. This paper will assess the graduate student's preferences between the online learning and face to face learning. Specifically, it will determine their level of perception towards the online teaching and in-person teaching. The study was conducted at the University of the City of Muntinlupa, University Road, Poblacion Muntinlupa City. The study will be anchored in the preference theory which states that individual choice behavior, such as how to identify and quantify an individual's preferences over a set of alternatives and how to construct appropriate preference representation functions for decision making (Dyer, 2013). This made use of a descriptive research design and employed a convenient sampling in selecting samples from the population. A sample size of one hundred thirteen students out of one hundred fifty-five students as a population. The researchers utilized a self-made survey questionnaire which aims to: 1) determine their demographic

profile in terms of home address and vaccination information; 2) determine the level of perception of MBA students in the conduct of online and onsite classes; and 3) determine the level of preferences of MBA students in enrolling between online classes and onsite classes for A.Y. 2022 – 2023. Based on the results, majority of the respondents are residing in Muntinlupa City and were fully vaccinated. This implies that the onsite classes will be feasible since the proximity of the location of the university is accessible for most students residing within Muntinlupa. Since majority of the respondents are fully vaccinated it is supported by the joint memorandum by CHED-DOH JMC No. 2021-004. In terms of the level of perception in the conduct between online classes and limited face-to-face classes, respondents strongly agree to continue with the use of online classes due to its benefits such as it is time-saving, provides comfort by staying home, as well as the accessibility provided by the online environment. The results of the present research show that, among the studied population, there is a greater preference for online learning compared to face-to-face learning. It should be noted that this preference is higher among those who sees the advantage of online learning as compared with the face-to-face learning. These results are further confirmed by the fact that more than half of the respondents stated that they wanted to continue their online class even the pandemic ends.

Keywords: online learning, face to face learning, graduate program, students' preference

Introduction

The onset of Covid-19 pandemic has compelled higher education institution to adapt with the use of information and communication technology to seamlessly engage with their student as a modality of learning and instruction. As all educational institution needs to close, all face-to-face lessons were cancelled, compelling many institutions, including our own

university, to immediately transition from face-to-face inperson learning to completely online lessons. The abrupt switch to fully online learning has been particularly stressful for many instructors and students who prefer in-person instruction. Online learning is often stigmatized as a weaker option that provides a lower quality education than in-person face-to-face learning (Hodges et al. 2020; Cited by Hew, K.F., Jia, C., Gonda, D.E. et al., 2020). A study from EDUCAUSE revealed through the survey of 11,141 faculty members from 131 U.S. institutions that found only 9% of faculty prefer to teach a fully online course. In other words, a whopping 91% of faculty do not wish to teach in a completely online environment. Students' opinions of fully online courses are not much better; a recent student survey by EDUCAUSE of more than 40,000 students across 118 American universities revealed that as many as 70% of the respondents mostly or completely prefer face-to-face learning environments (Gierdowski, 2019; cited by Hew, K.F., Jia, C., Gonda, D.E. et al., 2020). Naved et al. (2017), argue that, unlike face-to-face learning, e-learning has its advantages, such as flexibility, no need to travel to school, and a low cost, requiring only an Internet connection. However, this does not mean that e-learning does not have its shortcomings, such as inequities in accessing technology or learning computer skills, or even a lack of physical space for this teaching/learning process (Beaunoyer, Dupéré, & Guitton, 2020). E-learning is dependent on technology, the Internet, and various devices that not all potential beneficiaries can access (Sadeghi, 2020). Students' experience of quality learning is not only related to the teachers' skills and abilities to capture attention during the e-learning process but also to their own training, characteristics, and digital skills (Haznedar, et.al., 2020). In e-learning, physical space should foster involvement in interpersonal relationships, thus encouraging didactic communication (Lowenthal and Snelson, 2017) In addition, some studies show that e-learning does not have the same impact as face-to-face learning (Galy, and Downey, 2011). It seems that online students may lose their

focus and miss deadlines for different tasks. Over time, both teachers and students may experience various negative effects from e-learning, such as sight problems (due to long periods in front of the screen) or back pain, and, at the same time, they may feel the lack of activities in open spaces (Nazarlou, 2013). The study will be anchored in the preference theory which states that individual choice behavior, such as how to identify and quantify an individual's preferences over a set of alternatives and how to construct appropriate preference representation functions for decision making (Dyer, 2013). From this premise, the University of the City of Muntinlupa MBA program are making a transitional move in the modality of instructions from the blended learning approach to the limited in-person teaching. This paper will assess the graduate student's preferences between the online learning and face to face learning. Specifically, it will determine their level of perception towards the online teaching and in-person teaching. The research aims to analyze and assess how online and onsite learning were perceived by the respondents as learning modality in the higher education institution and examine and investigate the preferred learning modality.

Methodology

The study was conducted at the University of the City of Muntinlupa, University Road, Poblacion Muntinlupa City. This made use of a descriptive research design and employed a convenient sampling in selecting samples from the population. A sample size of one hundred thirteen (113) students or seventy-four percent (74%) out of one hundred fifty-five (155) students as a population. The researchers utilized a self-made survey questionnaire which aims to: 1) determine their demographic profile in terms of home address and vaccination information; 2) determine the level of perception of MBA students in the conduct of online and onsite classes; and 3) determine the level of preferences of MBA students in enrolling between online classes and onsite classes for A.Y. 2022 –

2023. For the data gathering procedure, the researchers administered the questionnaire to the MBA students of University of the City of Muntinlupa through the google forms. It is then forwarded to every student enrolled during 2nd Semester A.Y. 2021 – 2022. The researchers collected and tabulated the data in a week time to be interpreted and analyzed using the right statistical treatment. The quantitative analysis of data, the researchers made use of descriptive statistics and relative frequency percentage. This will determine the level of perception and preferences of MBA students towards the online and onsite classes. There is a general acceptance that 100 is the recommended minimum sample size. The literature contends that a ratio of respondents to variables is 10: 1 (Young & Peace, 2013; Kelly & Denson, 2018). The researchers believed that the sample size (N=113) in this case is adequate for this study.

Results and Discussion

Toward investigating the demographic profile and the level of perception and preferences of the MBA students in online and onsite classes and addressing the research question of the study, the researcher utilize JASP 16.2 by applying the relative frequency percentage and descriptive statistics. Upon testing the relative frequency percentage, the following data revealed the description pertaining to the demographic profile of the respondents as well as their level of perception in conducting online and onsite classes.

Table 1 Frequencies of Home Address

Vaccinated	Frequency	Percent
Muntinlupa City	47	42
Las Pinas City	9	8
Paranaque City	3	3
Makati City	1	1
Manila	1	1
Taguig City	1	1
San Pedro City	15	13
Binan City	4	4
Sta. Rosa City	7	6
Cavite	15	13
Provinces of Laguna	8	7
Camarines Sur	1	1
Benguet	1	1
Missing	0	0
Total	113	100

Table 1 shows the frequencies of MBA students' home address. Forty-two percent (42%) of the respondents are residing within Muntinlupa City. While, thirteen percent (13%) were both living in San Pedro City and Cavite. Eight percent (8%) and seven percent (7%) were residing in Las Pinas City and provinces of Laguna. The remaining respondents were living in the Sta. Rosa City, Binan City, Paranaque City, Camarines Sur, and Benguet as well as in the city of Manila, Taguig and Makati.

Table 2 Frequencies for Vaccinated MBA Student

Vaccinated	Frequency	Percent
First Dose only	1	1
Fully Vaccinated with Booster	65	58
Two Dose (Fully Vaccinated)	23	20
Missing	24	21
Total	113	100

Table 2 shows the frequencies of vaccinated MBA students. Fifty-eight percent (58%) of the respondents says that they are fully vaccinated with booster. While, twenty percent (20%) were fully vaccinated with just two dose of vaccines. However, only one percent (1%) got a first dose vaccine and twenty-one percent (21%) did not disclose their vaccine information. Based on CHED-DOH Joint Memorandum Circular No. 2021 – 004 “Guidelines for the implementation of limited face-to-face classes for all programs of higher education institutions (HEIs) in areas under alert levels system for Covid-19 response” states that only fully vaccinated students of HEIs under alert levels 1, 2 and 3 are allowed to join the limited face-to-face classes. Also, HEIs should advise fully vaccinated individuals with comorbidities or living with similar conditions to consider flexible learning and take face-to-face classes in the next semesters or whenever possible without any prejudice to readmission and maximum residency.

Table 3 Descriptive Statistics in the conduct of the limited face to face classes

Perception of limited face to face classes	Frequency	Percent	Mean	Std. Deviation	Interpretation Verbal
Total	113	100	1.093	2.195	Strongly Disagree

Legend: 4.21 - 5.00 - Strongly Agree; 3.41 - 4.20 - Agree; 2.61 - 3.40 - Neutral; 1.81 - 2.60 - Disagree; 1.00 - 1.80 - Strongly Disagree

Table 3 present the perception of the respondents in the conduct of the limited face-to-face classes. Thirty-three percent (33%) of the respondents disagree with the conduct of limited face to face, while thirty-two percent (32%) strongly disagree with the conduct of the limited face-to-face classes. However, only nine percent (9%) and four percent (4%) strongly agree and agree respectively on the conduct of the limited face-to-face classes. Therefore, respondents strongly disagree to participate in the conduct of the limited face-to-face classes with a total mean score of 1.093 and SD of 2.195. The result supports the study of Galy and Downey (2011), that e-learning does not have the same impact as face-to-face learning.

Table 4 Descriptive Statistics in the conduct of online classes

Perception of limited face to face classes	Frequency	Percent	Mean	Std. Deviation	Interpretation Verbal
Total	113	100	1.093	2.195	Strongly Disagree

Legend: 4.21 - 5.00 - Very Likely; 3.41 - 4.20 - Likely; 2.61 - 3.40 - Neutral; 1.81 - 2.60 - Unlikely; 1.00 - 1.80 - Very Unlikely

Table 4 presents the descriptive statistics on the perception of the respondents in the conduct of the online classes. Seventy percent (70%) of the respondents strongly agree on the conduct of online classes, while nineteen percent (19%) agree on the conduct of online classes. However, only three percent (3%) and two percent (2%) disagree and strongly disagree respectively on the conduct of online classes. Therefore, respondents strongly agree to continue the conduct of classes through the online modality of instruction with a mean score of 4.531 and SD of 0.867. The result supports the study of Haznedar,et.al. (2020) that students' experience of quality learning is not correlated with teachers' skills and abilities to capture attention during the e-learning process but more so through their own training, characteristics and digital skills.

Table 5 Descriptive Statistics on the Intent to enroll in an onsite (face to face) MBA Program for A.Y. 2022-2023

Intent to enroll in an onsite (face to face) MBA Program for A.Y. 2022-2023	Frequency	Percent	Mean	Std. Deviation	Interpretation Verbal
Total	113	100	1.093	2.195	Strongly Disagree

Legend: 4.21 - 5.00 - Very Likely; 3.41 - 4.20 - Likely; 2.61 - 3.40 - Neutral; 1.81 - 2.60 - Unlikely; 1.00 - 1.80 – Very Unlikely

Table 5 present the frequencies for the respondents' intent to enroll in an onsite (face to face) MBA Program for A.Y. 2022 - 2023. Thirty-five percent (35%) of the respondents are unlikely to enroll in an onsite (face to face) classes. While, thirty-three percent (33%) of the respondents perceived are very unlikely to enroll in an onsite (face to face) classes. Twenty-one percent (21%) have a neutral intention to enroll in the face to face classes. However, only eight percent (8%) and four percent (4%) of the respondents have likely to very likely perception to enroll in a face to face classes. Therefore, respondents are unlikely to enroll in the face to face classes for A.Y. 2022 - 2023 with a mean score of 2.15 and SD of 1.079.

Table 6 Frequencies for the intent to enroll in an online MBA Program for A.Y. 2022-2023

Intent to enroll in an online (face to face) MBA Program for A.Y. 2022-2023	Frequency	Percent	Mean	Std. Deviation	Interpretation Verbal
Total	113	100	1.093	2.195	Strongly Disagree

Legend: 4.21 - 5.00 - Very Likely; 3.41 - 4.20 - Likely; 2.61 - 3.40 - Neutral; 1.81 - 2.60 - Unlikely; 1.00 - 1.80 – Very Unlikely

Table 6 presents the frequencies for the respondents' intent to enroll in an online MBA Program for A.Y. 2022 - 2023. Sixty-eight percent (68%) of the respondents are very likely to enroll in an online class, While, seventeen percent (17%) of the respondents are likely to enroll in an online class. However, only four percent (4%) of the respondents are very unlikely to enroll in the online classes. Therefore, respondents are very likely to enroll in the online classes for A.Y. 2022 - 2023 with a mean score of 4.389 and SD of 1.097.

Conclusion

Based on the results, majority of the respondents are residing in Muntinlupa City and were fully vaccinated. This implies that the onsite classes will be feasible since the proximity of the location of the university is accessible for most students residing within Muntinlupa. Since majority of the respondents are fully vaccinated it is supported by the joint memorandum by CHED-DOH JMC No. 2021-004 which states that “Only fully vaccinated students in HEI’s located in Alert Levels 1, 2, and 3 shall be allowed to join the limited face to face classes. HEI’s shall advise fully vaccinated students with significant comorbidities themselves or living with individuals with similar condition to consider flexible learning and take face-to face classes in succeeding semesters or whenever possible without prejudice to readmission and maximum residency. HEI’s shall take precautionary measures, as needed for vulnerable groups who will participate in the limited face to face classes.”

In terms of the level of perception in the conduct between online classes and limited face-to-face classes, respondents strongly agree to continue with the use of online classes due to its benefits such as it is time-saving, provides comfort by staying home, as well as the accessibility provided by the online environment. The same positive results, such as the possibility

to stay at home, the friendly environment at home, and the possibility to have access to online materials were observed in a study conducted with Polish medical students (Baczek, Zagańczyk-Bączek, Szpringer, Jaroszyński, & Wozakowska-Kapłon, 2021) . These advantages could help create courses that fit the needs of certain categories of students (those who work, who are unable to attend courses, who cannot afford to study in another city, etc.). In this way, students would be given the opportunity to complete educational tasks at their own pace, within a defined time horizon that would allow them to consider them deeply and critically.

In terms of the preference to enroll between the online and face-to-face class, majority of the respondents will enroll in an online class as compared with the limited face-to-face class. The results of the present research show that, among the studied population, there is a greater preference for online learning compared to face-to-face learning. It should be noted that this preference is higher among those who sees the advantage of online learning as compared with the face-to-face learning. These results are further confirmed

by the fact that more than half of the respondents stated that they wanted to continue their online class even the pandemic ends. As mentioned above, the desire is stronger among those who only benefited from elearning during their studies. E-learning, like any form of education, also has its own set of positive and negative aspects. Decoding and understanding them will help educational institutions to create strategies for more efficient delivery of educational content to the beneficiaries of this process (Gherhes, et.al., 2021)

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**Level of Parent Fluent Readers' and Children Read-Aloud
Competencies in Storytelling of Bukas na
Aklat, Batang Mulat Community Service in Sitio San
Antonio, Poblacion, Muntinlupa City**

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Maglaya**

Abstract

The Bukas na Aklat, Batang Mulat is a community service reading program organized and implemented since 2018 in Sitio San Antonio, Poblacion, Muntinlupa City, the adopted community of the Pamantasan ng Lungsod ng Muntinlupa. The community service reading program is under the direct administration and supervision of the faculty, non-teaching staff, and early childhood education volunteer students of the College of Teacher Education. The program assessment, planning, implementation, and evaluation of the program using the Read-Aloud Strategy in storytelling for three years is directly organized by the Preschool Educators' Society officers and members together with the internal and external support from the university and stakeholders. Parent's training in storytelling, storybook community pantry, children clustered storytelling, and parent modular pieces of training are some of the highlights of the program implementation. The primary objective of the program is to train the community parents to be fluent readers and acquire the necessary competencies to be effective storytellers at home. Children in the community are the primary recipient of the program in gaining competencies in literacy and reading through storytelling. The objective of the study at hand is to assess the level of parent fluent readers' competencies and children read -aloud competencies in storytelling sessions implemented in the community from 2018-2022 and to identify significant implications of the program implementation based on the results of the study to further enhance the program. The

study follows a descriptive research design. Research self-made questionnaire was developed based on the Read–Aloud Strategy Framework (RSF) and distributed to the sixty–four (64) parent participants purposively selected as respondents of the study. To process the results and the data gathered, percentage and weighted mean were utilized to identify the level desired and standard deviation to measure how dispersed the data is about the mean, and t-test to compare the means of two samples. Outcomes in the level of the parent as fluent readers and the level of children competencies using read-aloud strategy both have a description of very great extent, this implies that the primary aim of the program was already achieved by the target clientele, however, looking at the lowest average percentage of the sub-variables among the parents in motivation skill it is highly recommended that further interactive programs must be provided. On the other hand, children must undergo creative and developmental skill activities at home to address the gap as revealed by the study using the read-aloud strategy. Furthermore, it is highly suggested that the program would be sustained and conduct research on the outcomes-impact of the program on the life of the participants.

Keywords: community service, reading program, read-aloud strategy, parent fluency, storytelling, storytelling competencies

Introduction

The community service reading program known as Bukas na Aklat, Batang Mulat (BABM) in Sitio San Antonio, Poblacion, Muntinlupa City started in the year 2018 by the soon-to-be preschool teachers in the College of Teacher Education. After the conduct of the needs assessment and analyzing the data from the participating parent and children, the reading program was conducted intentionally every semester participated by almost one hundred ten parents and children. After three consecutive years of program implementation using various types of strategies such as house-to-house distribution of

storybooks and storytelling modeling, parents' storytelling seminar, community storytelling, community book pantry, parents' storytelling contest, and the implementation of storytelling sessions at home using read-aloud strategy, it is but necessary to assess the effectiveness of the program with the community parents and children's participants on the convention of storytelling in helping children to acquire necessary reading skills. Storytelling is one of the methods utilized in the program for children to acquire the imperative competencies in literacy and reading. It is the art of revealing characters, images, and parts of a story through words and action using a storybook to elicit the listener's imagination and acquire the necessary competencies and skills in reading. Read-Aloud is a storytelling strategy adopted by BABM to train the parents as fluent readers and for the children to acquire necessary reading skills. It is a storytelling strategy that requires a storybook, a twenty-minute time allotment of storytelling sessions on a daily basis at home, and the use of different activities after the storytelling session. Using the Read-Aloud Storytelling Framework (RASf) framed for the reading program, one hundred percent participation of the parents and children is sought.

Community Parents Role in Storytelling

Parents are considered to be fluent readers who need to acquire requisite competencies to carry over the goal of the reading program. (Adituji, 2019) in her article, the Conversation points out that some children will learn to read more quickly than others, but all children need the practice to become skilled readers. A consistent home reading program can start children on the path to literacy and all of its benefits. The best way for children to become fluent readers on their own is through practice, and repeating beloved stories is one way to encourage practice. When parents read, children can listen and enjoy books that they wouldn't be able to read yet but this helps build their vocabulary and enjoyment. When children experience an

early reading with their parents it prepares them for the benefit of formal literacy instruction. In early childhood education, storytelling is not only an effective way of grasping the attention of children but also has many developmental benefits (Thompson, 2020). Stages of childhood are defined culturally by the social institutions, customs, and laws that make up a society. Researchers and professionals usually define the period of early childhood as birth to eight years of age (Tomonari, 2022). Parents' involvement with reading activities at home has a significant positive influence not only on reading achievement, language comprehension, and expressive language skills but also on children's interest in reading and attitude towards reading (Gest et al. 2004; Supplee et al. 2004). According to Flouri and Buchanan (2004), parental involvement in the children's reading practice was a more powerful force than any other family background. Research also shows that the earlier parents become involved in their children's reading, the more profound the results and the longer lasting the effect (Williams et al. 2002; Desforges 2003).

Benefits of Storytelling Among Community Children

The positive effect of the storytelling sessions at home in acquiring basic competencies in reading among children is the primary consideration in the implementation of BABM. Storytelling plays a critical part in the overall development of children; it offers several advantages to the children at hand. Storytelling can be used as an effective means to increase early literacy and promote reading comprehension skills (Haven & Ducey, 2007). Through active engagement, storytelling as a pedagogical strategy can strengthen reading comprehension by helping students develop a sense of story Aiox, (1988); Craig, Hull, Haggart, & Crowder, (2001); Phillips, (1999). Having a sense of story is critical for students to make sense of the text and derive meaning from a story. In storytelling, the interaction is personal, engaging, and immediate (Aiox, 1988). These characteristics allow storytelling to capture the attention of the

audience. This enhances an understanding of the story by providing a social context for literacy. Students learn the social aspects of language through observation and participation in storytelling (Craig et al, 2001). Children can have the ability to watch the storyteller use intonation and facial expressions to engage the audience (Aix, 1988). When students retell stories, they have the opportunity to further develop their skills of comprehension by relating stories with expressions. Eder (2007) describes using the oral tradition of storytelling as a powerful strategy for setting patterns of meaning.

Community Reading Program Implementation

The Bukas na Aklat, Batang Mulat Reading Program is now at its highest peak for program implementation assessment. The assessment is to find out the level of parents' competencies as fluent readers which will focus on the following sub-variables: 1) motivation skill 2) reading skill 3) questioning skill and 4) developmental skill 5) monitoring skill 6) critical thinking skill. Identifying the level of parents' competencies will be the source to enhance the parent's involvement in the implementation of the reading program at hand. On the other hand, the generated data in identifying the level of read-aloud competencies of the children under the sub-variables as 1) print awareness 2) listening skill 3) cognitive skill 4) developmental activities 5) creative skills, and 6) critical thinking skill will give way to improved and enhance the reading program involving the children. Generally, the main purpose of the study is to assess and identify the lowest rank among the sub-variables understudy to create appropriate programs, projects or activities for the next phase of the community service reading program implementation.

Objectives

The following objectives are set to achieve the goal of the study:

1. Assess the level of parent fluent readers' competencies and children read -aloud competencies in storytelling sessions implemented in the community under the Bukas na Aklat, Batang Mulat community service reading program from 2018-2022.
2. Identify significant implications of the program implementation based from the results of the study to further enhance the program of the community extension service reading program, Bukas na Aklat, Batang Mulat in Sitio San Antonio, Poblacion, Muntinlupa City.

Methodology

The study follows a descriptive research design. Descriptive research aims to accurately and systematically describe a population, situation, or phenomenon, a method that attempts to collect quantifiable information for statistical analysis of the population sample. The purposive and selective technique was utilized in the study to recruit participants that provide in-depth and detailed information about the investigation. The population sample was the identified parents of BABM members clustered into ten (10) with an appointed clustered leader. The Early Childhood Educators' Society (ECED –Society) student volunteers from the College of Teacher Education conducted four (4) weeks of community engagement in the community approved by the PLMUN Extension Office, Student Life and Development Office, Barangay Council of Barangay Poblacion, Muntinlupa City, and San Antonio Community Home - Owners Association. The survey was facilitated by the officers and members of ECED Society officers and members together with the BABM Parents Association Officers and cluster leaders on the 14th of June, 2022.

The research self-made questionnaire distributed to the parent participants was developed based on the Read–Aloud Strategy Framework (RSF) designed specifically for the implementation

of the reading program to assess and identify the level of parent readers' fluent competencies and the read aloud – competencies of children from Sitio San Antonio, Poblacion Muntinlupa City. Sixty-four (64) parents of the community service reading program purposively answered the self-made questionnaire with three parts to obtain the needed data. Part I. comprised the demographic profile of the respondents which include the age, gender, and grade level of the children. Part II. contained the read-aloud competencies of children in terms of print awareness, listening skills, cognitive skills, developmental skills, creative skills, and critical thinking skills. Part III. includes survey questions about the fluent readers' competencies of parents in terms of motivation skills, reading skills, questioning skills, developmental skills, monitoring skills, and critical thinking skills. Four-point scale in determining the children read-aloud and parent fluent readers' competency levels were utilized.

Scale	Numerical Rating	Descriptive Rating
4	3.1 – 4.0	To the very great extent
3	2.1 – 3.0	To the great extent
2	1.1 - 2.0	To the moderate extent
1	0.0 - 1.0	Not at all

The questionnaire was distributed to the parent respondents and immediately submitted the questionnaire with responses to the ECED student volunteers and cluster leader. Information and response of the participants were processed and subjected to statistical treatment. To process the results and the data gathered, the following statistical treatment was employed: percentage for the demographics of the participants, weighted mean to determine the read-aloud and parent readers' competency levels, and standard deviation to measure how dispersed the data is in relation to the mean, and t-test to compare the means of two samples.

Results and Discussion

4.1 Demographics

Table 1 shows most of the children's participants are between the age of 6-12 with a percentage of 54.687%, early childhood education, and storytelling is not only an effective way of grasping the attention of children but also has many developmental benefits (Thompson, 2020). The early childhood education age ranges from 0-8 years old (Tomanari, 2022) it proves that ages 6-8 years old still belong to the early childhood group based on the stages of growth and development.

Table 1 Preschool Competencies "Kakayahan Ng Bata Sa Pakikinig Ng Kuwento" Children Participants Age Group

Age range	Siblings	Percentage
1-3	7	10.938%
4-6	16	25%
6-12	35*	54.687%
13 and above	4	6.25%
Refused to disclose	2	3.125%
Total	64	100%

Note: *-significant

As indicated, the children participants' age ranges from 1-3 years old with 10.938%, 4-6 years old with 25%, 6-12 years old got the highest percentage of 54.687%, 13 and above got 6.25% and 3.125% are those children signify by the parents not to disclose the age of their children. This table shows that the participation of the children is within the range of children who needs to undergo storytelling session with their parents, according to (Adituji, 2019) when children experience an early reading with their parents it prepares them for the benefit of formal literacy instruction.

Table 2 shows most of the parents' participant are between the age of 36-50 with a percentage of 42.187%, Pasupathi, et al., (Pasupathi et. al 2002) speculated, based on selectivity theory that older adults would make a greater effort to establish a meaningful relation to their child listener in their storytelling.

Table 2 Parent Fluent Readers' Competencies "Kakayahan Ng Magulang Sa Pagbabasa" Parent/Guardian Participants Age Group

Age range	Parent/Guardian	Percentage
20-35	26	40.625%
36-50	27*	42.187%
51 and above	6	9.375%
Refused to disclose	5	7.813%
Total	64	100%

Note: *-significant

This table shows that there are 26 parents with an average percentage of 40.625% most of the parent/ guardian participants are between the age of 36-50 with a percentage of 42.187%, and there are only 6 parent/guardians with 9.375% for the age range of 51 and above and there are 5 parent/guardian with 7.831% who refuse to disclose their age. This table shows that most of the parents with the age range from 36-50 years old are parents who are active in telling stories to their children.

Table 3 shows that most of the participants in parent/guardian were female with a percentage of 60.937%, mother-child storytelling is a universal activity that predicts literacy development and can play a promising role, maternal elaborative and repetitive utterances positively predicted narrative quality, Kanaya, et.al., (Kanaya, et.al 2019) and in

siblings, most of the participants is male with the percentage of 64.063%, the result is highly significant for males are significantly lagging behind their female peers in literacy skills (Guay, 2018).

Table 3 Demographics Of Parents/Guardian And Children In Terms Of Gender

Gender	Parent/Guardian	Percentage	Siblings	Percentage
Male	24*	37.5%	41*	64.063
Female	39	60.937%	0 0%	0 0%
LGBT+	0 0%	0 0%	0 0%	0 0%
Refused disclosure	1	1.563%	23	35.937%
Total	64	100%	64	100%

Note: *-significant

This table shows that most of the participants in the parent/guardian were female with a percentage of 60.937%, 24 males with a percentage of 37.5%, 0 LGBT with a percentage of 0%, and 1 who refuse to disclose the gender with 1.563%, significantly in siblings 41 where male with the percentage of 64.063%, 0 for female and LGBT with the percentage of 0% and 23 refuse to disclose their gender with 35.937%. The tables show that most of the sibling participants of the reading program are males that positively answer the problem of why boys don't read and that this problem negatively impacts male students (Jacobson, 2018).

Table 4 shows that most of the participants are preschool level with a percentage of 20.3125%, Shanon, (2020) states that children love stories, stories are magic, that can create other worlds, emotions, and ideas and make every day seem incredible and from a very young age, children learn how to

enjoy a story both for pleasure and to help them make sense of the world and themselves. Kids between 1-5 years of age respond best to stories and kids above 5-6 years of age must be encouraged to engage in storytelling activities with parents (Arunima, 2020). According to Patel, (2020) storytelling is enjoyed by children from kindergarten to the end of the elementary grades.

Table 4 Demographics In Terms Of Grade Level

Grade Level	Number of Students	Percentage
Not Schooled	7	10.9375%
Daycare	1	1.5625%
Preschool	13	20.3125%
1	6	9.375%
2	9	14.0625%
3	10	15.625%
4	7	10.9375%
5	2	3.125%
6	3	4.6875%
7	2	3.125%
8	1	1.5625%
Refused to disclose	3	4.6875%
Total	64	100%

This table shows that most of the participants are preschool level with a percentage of 20.3125% with 13 participants, grade 3 got 15.625% with 10 participants, grade 2 got 14.0625% with 9 participants, children that are not studying, and grade 4 both with 10.9375% along with 7 participants, grade 1 with the percentage of 9.375% with 6 participants, grade 6 and participants who refuse to disclose their grade level both got 4,6875% with 3 participants, grade 5 and grade 7 got 3.125% with 2 participants and daycare and grade 8 got the lowest percentage of 1.5625% both with 1 participant. This implies that the greatest number of participants belong to the preschool age,

are beneficiaries of the BABM community service reading program. Table 5 shows Print Awareness with the highest preschool competencies with an average of 3.781. Understanding how the print works come about through the active intervention of adults, who points out letters, words, and other features of the print. Reading with the adults will help children learn the very concept of word as a foundation, an essential for pre-reading concepts.

4.2 Pre School Competencies

Table 5 Preschool Competencies "Kakayahan Ng Bata Sa Pakikinig Ng Kuwento"

Sub variables	Average	Description
Print Awareness	3.781	Very Great Extent
Listening Skill	3.692	Very Great Extent
Cognitive Skill	3.578	Very Great Extent
Developmental Activities	3.520	Very Great Extent
Creative Skills	3.520	Very Great Extent
Critical Thinking Skills	3.666	Very Great Extent

This Table shows Print Awareness with an average of 3.78125 with the description of Very Great Extent confirming that children participants appreciated and noticed the pictures, colors of the picture letter, and words in the story books. Listening Skill with an average of 3.692 with the description of Very Great Extent connoted that the participants were interested in listening to the stories and answered specific questions based on the story heard. The Cognitive Skill with an average of 3.578 with the description of Very Great Extent proves that participants identified the characters, understood the moral lesson of the stories, and applied the moral lesson of the stories in their personal life. Critical Thinking Skills with an

average of 3.666 with the description of Very Great Extent realized that based on the moral lesson of the stories heard they need to change their attitude and behavior for the better. Developmental Activities with an average of 3.520 got the lowest average with the description of Very Great Extent participants were less exposed to the different activities after the storytelling session and participants cannot retell the stories by themselves. Creative Skills with an average of 3.520 also got the lowest average but still with the description of Very Great Extent revealed that participants' creative activities were not provided by the parent/guardian and less appreciation and reward were received by the children.

4.3 Parent Fluent Readers' Competencies

Table 6 shows Critical Thinking Skill with the highest average of 3,692 in the competencies of parent fluent reader. Mudzielwana, (2014) found that parents should have parental meetings every quarter to share their experiences in helping their children with reading skills; a good relationship between parents and educators should be established; educators must provide parents with information on how to develop reading skills of their children and that the primary motivation for involving parents in literacy development is that the involvement seems to benefit both parent and the child. Listening to proficient readers using a read-aloud strategy provides a model for fluent reading.

Table 6 Parent Fluent Readers' Competencies
"Kakayahan Ng Magulang Sa Pagbabasa Ng Kuwento"

Sub variables	Average	Description
Motivational skill	3.494	Very Great Extent
Reading skill	3.619	Very Great Extent
Questioning skill	3.567	Very Great Extent
Developmental skill	3.510	Very Great Extent

Monitoring skills	3.666	Very Great Extent
Critical thinking skills	3.692	Very Great Extent

This table shows Motivational Skills with the lowest average of 3.494 with the description Very Great Extent confirming that parents do not engage more in preparing any motivational materials like realia, pictures, and instructional materials before the storytelling session. Reading Skill with an average of 3.619 with the description of Very Great Extent connoted that parents read, identified the characters, and master the moral lesson before the onset of the storytelling session. Questioning Skill with an average of 3.567 with the description Very Great Extent proved that parents prepared questions about the character, events, and moral lesson of the stories. Developmental Skill with an average of 3.510 with the description to the Very Great Extent explained that parents allowed children to do minimal interactive activities after the storytelling session. Monitoring Skill with an average of 3.666 with the description Very Great Extent revealed that parents monitored, observed, and noted the manifested competencies of the children after each storytelling session. Critical Thinking Skill with the highest average of 3.692 affirmed that parent's attendance in the storytelling seminars, read-aloud strategy in storytelling, and the passion to religiously conduct storytelling sessions daily were some of the contributory factors to being an effective parent fluent reader.

Table 7 Mean, Standard Deviation and Ranges

	N	Mean	SD	SE
Preschool competencies "kakayahan ng bata sa pakikinigng kuwento"/	64	3.669	0.558	0.077

parent fluent readers' competencies "kakayahan ng magulang sa pagbabasa"		3.592		0.070
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Significant value 0.05* or 0.001**

This table shows the Mean and Standard deviation of the two subjects between Preschool Competencies "Kakayahan ng Bata sa Pakikinig ng Kuwento" and Parent Fluent Readers' Competencies "Kakayahan ng Magulang sa Pagbabasa" with the number of participants of 64 with standard deviation of 0.558.

Table 8 Paired Samples T-Test

	df	p-value
Preschool competencies "kakayahan ng bata sa pakikinigng kuwento"/	52	3.669
parent fluent readers' competencies "kakayahan ng magulang sa pagbabasa"		3.592

Conclusion

From the preceding assessment, analysis, and discussion of the results, these essential conclusions are drawn: There are four (4) identified significant implications to be considered to further improve the implementation of the community service reading program in the adopted community.

The Implication to Children

1. The storytelling activity provided by the BABM reading program for the greatest number of the target clientele with the ages ranging from 0-8 years old is the actual age group who are so interested in storytelling. Continuation of storytelling activities in the community is highly recommended for children within the age range.
2. To consider the result in the grade level of the children, it is highly recommended that preschool children must be given priority among all the grade level participants.
3. Read-Aloud strategy in storytelling is one of the factors that help the children develop the critical thinking skill after being exposed to the same storytelling sessions for three (3) years.
4. Children must be exposed to the different variety of interactive activities to develop both developmental and creative competencies.

The implication to Parents/Guardians

1. Children need an adult member of the family to conduct a storytelling session to improve the literacy rate using a read-aloud strategy. The parent/ guardian must be fully equipped as a fluent reader to be an effective storyteller. Considering the age range of the parent participants, parents are still capable to attend training sessions to up-skill their storytelling competencies. Focus group discussion with the parents and the community volunteers is highly recommended to identify and aid the gap.

2. Most of the parent participants in the storytelling sessions are female. It is high time to provide a program for the male members of the family like the father, brother, uncle, and grandfather to be a parent fluent reader also. Special training must be planned and organized to address this concern.
3. Attendance of the parent participants in all the special training sessions, seminars, and webinars, provided by the community volunteers is highly sought.

The implication to the Community Extension Volunteers

1. Community volunteers are encouraged to engage actively in the planning and preparation of new and more interactive activities and training sessions both for the children and parents. Training of the trainers is highly recommended.
2. Community volunteers are tasked to consider the developmental skills and creative skills competencies of the children that belong to the lowest rank from the result of the study. Parents must be informed of the result of the study as well as conduct special sessions like demonstration, music, arts, and movement to improve the needed competencies.
3. Community volunteers are required to teach the parents to learn to use the environment to find easy, accessible, and affordable instructional materials to improve the motivational skill that rank the lowest among the competencies of the parent as a fluent reader.

Implication to the goals and objectives of Bukas na Aklat, Batang Mulat Community Service Reading Program

1. All the sub-variables from the children and parent competencies got the highest description of very great extent, as implied in the result of the study, it can be concluded that all the programs, projects, and activities

implemented before this study are appropriate and highly commendable, however, program enhancement is necessary.

2. It is highly recommended that research must be conducted on the input, outcomes, and outcomes – impact using the plan action logic model to identify the short, immediate and long-term impact of the BABM reading program on the life of the participants.

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Architecture Model for Secure Campus Network in Pamantasan ng Lungsod ng Muntinlupa

Brian Borlagon

Abstract

Security has been a pivotal issue in the design and deployment of an enterprise network. With the innovation and diffusion of new technology such as Universal computing, Enterprise mobility, E-commerce and Cloud computing, the network security has remained as an ever-increasing challenge. A Campus network is an important part of campus life and network security is essential for a campus. Campus network faces challenges to address core issues of security, which governed by network architecture. Secured network protects an institution from security attacks associated with network. A university network has a number of uses, such as teaching, learning, research, management, e-library, result publishing and connection with the external users. Network security will prevent the university network from different types of threats and attacks. The theoretical contribution of this study is a reference model architecture of the university campus network that can be followed or adapted to build a robust yet flexible network that responds to the next generation requirements. A hierarchical architecture of the campus network is configured with different types of security issues for ensuring the quality of service. In this project, a tested and secure network design is proposed based on the practical requirements and this proposed network infrastructure is realizable with adaptable infrastructure.

Introduction

As the computers and networked systems thrive in today's world, the need for increase and strong computer and network security becomes increasingly necessary and important. The

increase in the computer network system has exposed many networks to various kinds of internet threats and with this exposure. The security may include identification, authentication and authorization, and surveillance camera to protect integrity, availability, accountability, and authenticity of computer hardware or network equipment. There is no laid-down procedure for designing a secure network. Network security has to be designed to fit the needs of an organization. Campus network is essential and it plays an important role for any organization. Network architecture and its security are as important as air, water, food, and shelter. Computer network security threat and network architecture are always serious issues. A campus network is an autonomous network under the control of a university which is within a local geographical place and sometimes it may be a metropolitan area network.

Generally, IT manager in a computer network faces plenty of challenges in the course of maintaining elevated availability, excellent performance, perfect infrastructure, and security. Securing a big network has been always an issue to an IT manager. There are a lot of similarities between securing an outsized network and university network but each one has its own issues and challenges. Present educational institutions pay more attention to IT to improve their students' learning experience. Architects of campus can achieve this if IT managers hold on to the fundamental principles addressed in this reference architecture, namely LAN or WAN connectivity design considerations, security, and centralized management. The network infrastructure design has become a critical part for some IT organizations in recent years. An important network design consideration for today's networks is creating the potential to support future expansion in a reliable, scalable and secure manner. This requires the designer to define the client's unique situation, particularly the current technology, application, and data architecture. The physical network infrastructure is required for a contemporary university network. University Management and IT manager may know exactly what kind of

network they want to set up, upcoming plans, and expected growths. Contingencies for future area, power, and other resource must be part of the physical plan of a university. Building a contemporary university network atmosphere also contains functional and safety elements that also go beyond the IT department's obligations and skills. The hierarchical network design is considered in the proposed system and correspondent network will be scalable; performance and security will be increased; and the network will be easy to maintain. A hierarchical architecture of campus network is configured with different types of traffic loads and security issues for ensuring the quality of service.

Methodology

The study is derived from the experience of the researcher and describes the nature of the network as part of the day-to-day dealings in the Information and Technology Office. The study uses a qualitative approach.

Background

There are various types of network such as Personal Area Network (PAN), Local Area Network (LAN), Metropolitan Area Network (MAN), Campus Area Network (CAN), Storage Area Network (SAN) and Wide Area Network (WAN). A Personal Area Network (PAN) is a computer network organized around an individual person. Personal Area Networks typically involve a mobile computer, a cell phone and/or a handheld computing device such as a PDA. A Local Area Network (LAN) is a group of computers and associated devices that share a common communications line or wireless link. Typically, connected devices share the resources of a single processor or server within a small geographic area. A Metropolitan Area Network (MAN) is a network that interconnects users with computer resources in a geographic area or region larger than that covered by even a large Local Area Network (LAN) but smaller than the area covered by a Wide Area Network (WAN). A

Campus Area Network (CAN) is a proprietary Local Area Network (LAN) or set of interconnected LANs serving a corporation, government agency, university, or similar organization. A Storage Area Network (SAN) is a high-speed network of storage devices that also connects those storage devices with servers. It provides block level storage that can be accessed by the applications running on any networked servers. A Wide Area Network (WAN) is a geographically dispersed telecommunications network. The term distinguishes a broader telecommunication structure from a Local Area Network (LAN). Extensive research or project has been done in the position of network architecture and security issues in campus networks.

Network Architecture in Campus Networks The campus network of our study is designed in a hierarchical manner which is a common practice of campus and enterprise networks. It provides a modular topology of building blocks that allow the network to evolve easily. A hierarchical design avoids the need for a fully meshed network in which all network nodes are interconnected.

Designing a campus network may not appear as interesting or exciting as designing an IP telephony network, an IP video network, or even designing a wireless network. However, emerging applications like these are built upon the campus foundation. Much like the construction of a house, if the engineering work is skipped at the foundation level, the house will crack and eventually collapse. If the foundation services and reference design in an enterprise network are not rock-solid, applications that depend on the services offered by the network like IP telephony, IP video and wireless communications will eventually suffer performance and reliability challenges.

To continue the analogy, if a reliable foundation is engineered and built, the house will stand for years, growing with the owner through alterations and expansions to provide safe and reliable service throughout its life cycle. The same is true for an enterprise campus network. The design principles and

implementation best practices described in this document are tried-and-true lessons learned over time. Security Issues in Campus Network There are a wide range of network attacks and security threats, network attack methodologies, and categorizations of network attacks. The query is: how do we minimize these network attacks? The type of attack, as specified by the categorization of reconnaissance, access, or DoS attack, determines the means of mitigating a network threat.

Table 1. Identify the threats

Threat	External Threat	Consequences
Internal E-mail with virus	External origination internal use	Could infect system reading email and subsequently spread throughout entire organization.
Network Virus	External	Could enter through unprotected ports, compromise whole network.
Web based virus	Internal browsing to external site	Could cause compromise on system doing browsing and subsequently affect other internal systems.
Web server attack	External to web servers	If web server is compromised hacker could gain access to other systems internal to network
Denial of service attack	Internal	External services such as web Email and ftp could become unusable. If router is attack , whole network could go down
Network User Attack	Internal to anywhere	Traditional border firewalls do nothing for this attack.

Internal employee)		Internal segmentation firewall can help contain damage.
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Types of Network Attacks:

Classes of attack might include passive monitoring of communications, active network attacks, close-in attacks, exploitation by insiders, and attacks through the service provider. Information systems and networks offer attractive targets and should be resistant to attack from the full range of threat agents, from hackers to nation and states. A system must be able to limit damage and recover rapidly when attacks occur. Here are some attacks types:

1. Passive Attack
2. Active Attack
3. Distributed Attack
4. Insider Attack
5. Close-in Attack
6. Phishing Attack
7. Hijack attack
8. Spoof attack
9. Buffer overflow
10. Exploit attack
11. Password attack

Real Time Data: Some Network Attacks

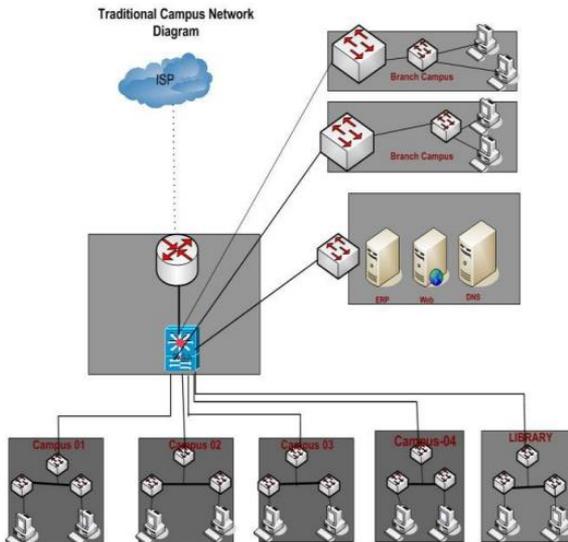
A. Denial of Service (DoS):

Denial of service (DoS) is an interruption of service either because the system is destroyed, or because it is temporarily unavailable. Examples include destroying a computer's hard disk, severing the physical infrastructure, and using up all available memory on a resource. Fig1 shows a real time value of DoS attack data in a campus network using Cyberoam security device. After Configure Firewall and VLAN for DoS attack Attacker attempted DoS

Attack but the security device dropped the traffic which we have shown in the diagram.

B. ARP Spoofing Attack

Figure 1



ARP spoofing is a type of attack in which a malicious actor sends falsified ARP (Address Resolution Protocol) messages over a local area network. This results in the linking of an attacker's MAC address with the IP address of a legitimate computer or server on the network. We are showing some real time data that attacker using Netcut software exploit the weakness in the stateless

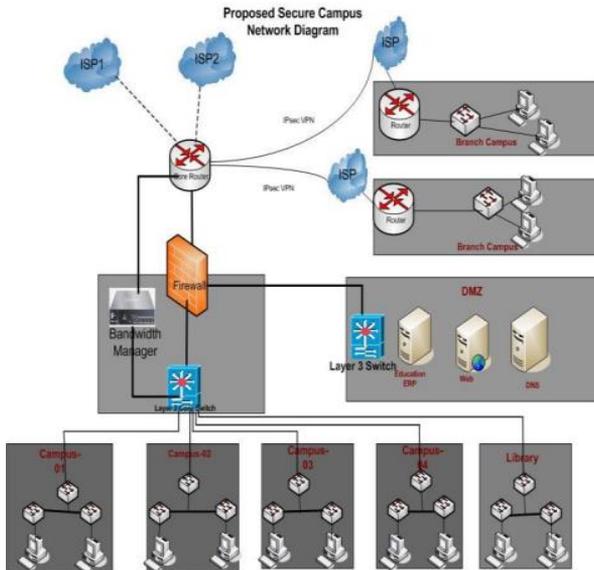
ARP protocol due to the lack of authentication in a campus network.

Mitigating the Known Attacks

Here are some proposed steps for mitigating the known attacks of a campus network:

- Proposed cost effective design of a Secure Campus Network.
- Creation of VLANs (Virtual LAN) for security.
- Implement firewall for internal and external security.
- Virtual private network use for branch campus

Figure 2



Implementation of Cost Effective Secure Campus Network

Several challenges confront the implementation of a secure network on a university campus, but the challenge central to this topic is security. Henceforth, we have outlined in detail several possible solutions in maintaining a network, the design of our network in order to encompass such solutions.

A. Creation of VLANs (Virtual LAN)

For security It's easy to see why virtual LANs have become extremely popular on networks of all sizes. In practical terms, multiple VLANs are pretty much the same as having multiple separate physical networks within a single organization — without the headache of managing multiple cable plants and switches. Because VLANs segment a network, creating multiple broadcast domains, they effectively allow traffic from the broadcast domains to remain isolated while increasing the network's bandwidth, availability and security. We have suggested some VLANs for better security of campus network and reducing Broadcast.

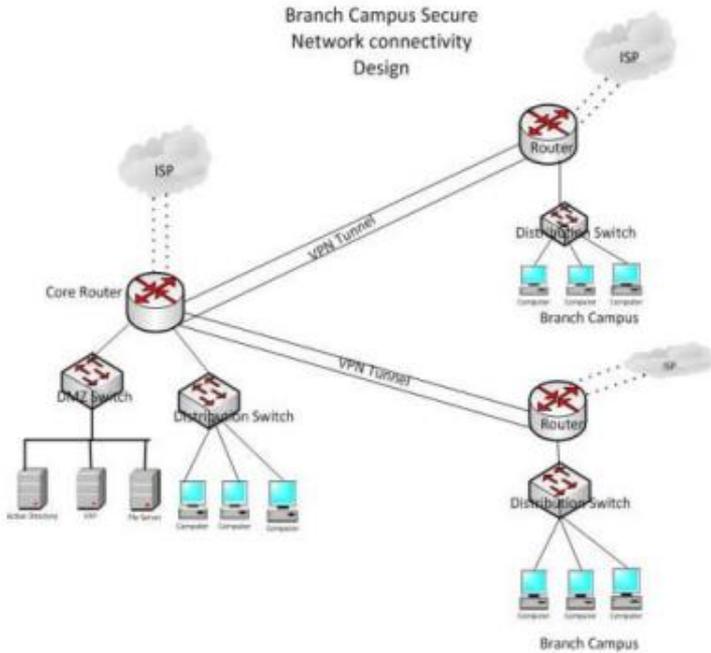
Proposed VLAN for Campus Network	VLAN ID	VLAN NAME
1	10	Student
2	15	Faculty
3	20	Admin
4	25	Computer Lab
5	30	Exam
6	35	Accounts
7	40	Internal Servers

B. A firewall works to monitor and block or allow network traffic, both incoming and outgoing, on a private network. While there is a hardware firewall to help protect the campus network security, this firewall affects certain outbound traffic and prevents unauthorized inbound traffic. NetBIOS, SMTP and other miscellaneous ports determined to pose a security risk are blocked in the outgoing direction. This does not affect the majority of academic work related programs used on the campus.

C. Virtual Private Network (VPN) Use for branch campus

A Virtual Private Network (VPN) extends a private network across a public network, such as the Internet. It enables a computer or network-enabled device to send and receive data across shared or public networks as if it were directly connected to the private network, while benefiting from the functionality, security and management policies of the public network. A VPN is created by establishing a virtual point-to-point connection through the use of dedicated connections, virtual tunneling protocols, or traffic encryption. Major implementations of VPN include Open VPN and IPsec. Campus VPN - provides a full tunnel VPN service that is a secure (encrypted) connection to the network from off campus. Common uses of the Campus VPN include access to file sharing/shared drives and certain applications that require a Campus IP address. The Campus VPN has a 20-hour session limit.

Figure 3



Results and Discussion

The study is based on the findings from previous studies including the personal experience of the research, which led to importance establishing security in the Network connectivity Design.

Conclusion

Network architecture and its security are important any organization. If we follow the hierarchical network design, network will be scalable, performance and security will be increased, and the network will be easy to maintain. In this work, we proposed a compact cost effective secure campus network

design based on the work environment and required scalability, security and other aspects. This proposed network infrastructure is realizable with adaptable infrastructure. It also provides an overview of the best practices in mitigating the known attacks and recommendation on how to prevent reoccurrence attacks.

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Training Needs Assessment of CITCS Parents on the use Technology: Crafting a Sustainable Community Extension Online

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Abstract

The internet has revolutionized the way we work, play, communicate, manage and, most importantly, learn. The digital world has taken away almost all limits on education and allowed users to develop an online learning platforms which enable us to teach and learn in a comprehensive way. This study sought to describe the training needs assessment of the Parents of the Students of CITCS based on their perception on Extension Program of the college in terms of an online learning platform tools and become an instrument in changing lives for them by providing sustainable projects. The study used the descriptive method of research and participants were the parents of the students of CITCS. Frequency counts, ranking, and weighted means were the basic statistical tools used to determine the level of needs for the different categories identified. A sustainable extension on the use of an online learning platform program is proposed for the benefit of both CITCS extension program and the parents. Assessing the needs of the beneficiary would help for the effective project implementation and would eventually result into more sustainable projects.

Keywords: *Training Needs Assessment (TNA), Sustainable Extension Program, Online Learning Platform, Computer Training Program, Faculty and Community Development Program, Information Communication Technology*

Introduction

In the midst of pandemic, online learning took on new forms according to what resources the district had. A set of online learning platform training was created as an educational supplement to the parents of the students of the College of Information Technology and Computer Studies relative to the college extension program. The role of extension programs continue to undergo a transformation, with a focus on engaging the end-user to innovate. Extension programs that once relied on top-down program delivery now see value in local modifications of technology to fit within the needs of the parents of the CITCS students.

Training Needs Assessment is a systematic process of investigating a population or community to assess the state of current resources such as knowledge, abilities, interests, and approaches pertinent to the focus of the needs assessment such as concern, aspiration, or intention. A goal of providing survey to the beneficiary of the training program is to know the residents' opinions about the development of services within the community, their satisfaction with services, and what particular services are needed.

Assessing the needs of the local community would help for the effective project implementation and would eventually result into more sustainable community extension program. Evaluating the needs of the local community will be part of the community development as it would be the fire starter for the betterment of their community life. According to Noelah Mae Borbon (2020) she believed that community development needs an effective scrutinizing to increase the capacity of the host community to improve the quality of life and recommend for future community-engaged efforts and workforce development, which are important for responding to increasing calls for community needs' assessments.

Community Extension is one of the tri-fold function in Pamantasan ng Lungsod ng Muntinlupa that plays an important role in the social transformation and became an instrument in

changing the lives of many Muntinlupenos through sustainable projects. This study is made to propose a sustainable extension program that would seek to develop the parents of the students of College of Information Technology and Computer Studies and improve the quality of life in the new setup of the online learning platforms to make them be guided on the said innovations.

Various studies have been conducted on literacy needs and support on the online learning platforms for education. In the study of Amparado and Colonia (2020), the researchers have identified that the sustainable programs of the University for the Parents of our students shall include familiarity on the use of the Online Learning Platform. In other study, researchers had known that a successful computer literacy program designed for the parents as one of the main beneficiary of the University would need to work in a diverse set of conditions such as the lack of knowledge in handling and operating Online Learning Platforms, students/ child motivation level especially in this new setup of learning education system, and different levels of community engagement and beliefs (Semblante and Amparado, 2018). Today's generation it is better for the Parents to know how they can work with their child/ student when interacting to the latest technology and other common tools used in this new normal setup of education.

As stated by Drossel and Eickelman (2016) the rapid transformation in the field of technology which is considered the most important characteristics of this generation, makes it imperative for the parents and faculty in all sectors to develop their capabilities because these changes disrupted the manner how parents deal and connect with their children/ students. Considering the availability and usage of new communication tools in almost all aspects of our lives in a digitized world, inclusion of technology- related skills is part of the development of this proposed program.

With this, a research was conducted to determine the training needs of the parents of the students of the College of

Information Technology and Computer Studies and to assess the parents' level of familiarity with the online learning platform tools. Specifically, this study sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of: Age, Sex, Civil Status, Occupation and Educational Attainment?
2. What are the training needs of the Parents of the Students of CITCS in terms of the Online Platform tools?
3. How many parents are engaged and recognize the digital online communication tool for learning?
4. What is the assessment of the parents' level of familiarity with the online learning platform in terms of:
 - a. Learning Management System
 - b. Social Media Platform
 - c. Video Conferencing
 - d. Instant Messaging
 - e. Email Application
5. What is the common experience of the parents in the implementation of a flexible learning in terms of the following:
 - a. Quality of Internet Connection
 - b. Quality of the Devices Used
 - c. Quality of an Online Learning Platform Used
 - d. Student Interaction Via Online Learning Platform
 - e. Quality of Attentiveness of the Student

Objectives:

This study aims to assess the needs of the local community which are the Parents of the Students of the College of Information Technology and Computer Studies.

1. To identify the demographic profile of the resident in terms of age, gender, current employment

2. To determine if the parents' recognize the Online Learning Platform Tool;
3. To assess the parents level of familiarity with the Online Learning Platform; and
4. To determine the overall experience of the parents in terms of the implementation of a flexible learning.

Methodology

This study used the descriptive method to assess the need of the community as a basis for the proposal for a sustainable extension program.

The participants of the study are the parents of the students of the College of Information Technology and Computer Studies. The instrument used in this study is the Training Needs Assessment form created to align the needs of the respondents in terms of an Online Learning Platform used. The survey has four parts; the first part is to identify the demographic profile of the respondents, the second part is to determine if the parents recognize the Online Learning Platform tool, the third part is to assess the level of parents' familiarity and last is to determine the overall experiences of the respondents in terms of the implementation of flexible learning. This tool will be used to evaluate to what degree is the need of the respondents to help and assist them in the new setup of an online learning platform. Google Forms was used to digitally collect the responses of the parents on the survey questionnaire. Links to the Google Form were distributed to the Professional Development Google Classroom to properly address the parents of the students of the CITCS.

The collected data were tallied and interpreted using basic statistics like weighted mean. Weighted mean was used to determine the demographic profile and to assess the needs of the parents in terms of the use of a digital platform for education. The given scale was used to interpret the result of the data gathered: 3.50 – 4.00 = highly familiar/ satisfied; 2.50 – 3.49 =

familiar/ satisfied; 1.50 – 2.49 = somewhat familiar/ dissatisfied;
 1.00 – 1.49 = not familiar/ very dissatisfied

Results and Discussion

Presented herein is the tabulation, presentations and analysis of the data gathered.

Table 1. The Demographic Profile of the Respondents According to Age and Sex

Profile Variables	Frequency (n=1634)	Percentage (%)
Age		
12 and below	0	0.0
13 – 20 years old	11	0.7
21 – 30 years old	72	4.4
31 – 40 years old	170	10.4
41 – 50 years old	753	46.1
51 and above	628	38.4
Sex		
Male	337	20.6
Female	1297	79.4
Civil Status		
Single	229	14
Married	1114	68.2
Widowed	171	10.5
Separated	120	7.3
Occupation		
Not Employed	747	45.7
Self- Employed	278	17
Employed	608	37.2
Educational Attainment		
Student	23	1.4
Elementary Level	82	5
Elementary Graduate	89	5.4
High School Level	263	16.1
High School Graduate	468	28.6

Vocational/ Short Courses	99	6.1
College Level	288	17.6
College Graduate	298	18.2
Undergraduate	1	0.1

To be acquainted with the respondents, their five personal profiles such as age, sex, civil status, occupation, and educational attainment were presented in Table 1. Most of the respondents are aged 41 – 50 with a total of 753 or 46.1%, followed by 51 and above with a total of 628 or 38.4%. Furthermore, Table 1 describes the respondents according to gender. The above shows that out of the 1634 respondents, 1297 or 79.4% were female while male respondents constituted 337 or 20.6% of the total number of respondents. Some of them are married with a number of 1114 or 68.2% which means the respondents have the capability to be engaged in parenting. Table 1 also presents the percentage with regard to occupation and educational attainment of the respondents which shows that are not employed with a number of 747 or 45.7% that majority are High School Graduate with a number of 468 or 28.6% of the total respondents have the opportunity for the CITCS Extension program to provide them a training related to a digital communication tool.

Presentation of the Parent's Recognition of the Online Learning Platform Tools in Multiple Options.

Table 2. Total Number of Parents Recognize the Online Learning Platform Tools

Category(s)	Frequency (<i>n</i> = 1634)	Percentage (%)	Rank
Q1. Learning Management System			
Google Classroom	1529	72%	1
Microsoft Teams	199	9%	2
Moodle	86	4%	3

Blackboard	72	3%	4
Canvas	87	4%	3
Q2. Social Media Platform			
Facebook	1614	62%	1
LinkedIn	43	2%	3
Pinterest	78	3%	2
Q3. Video Conferencing			
Google Meet	1499	54%	1
Microsoft Teams	122	4%	3
Blackboard Collaborate	18	1%	4
Zoom	1031	37%	2
TeamViewer Meeting	29	1%	4
Q4. Instant Messaging			
Messenger	1621	82%	1
Viber	196	10%	2
WhatsApp	92	5%	3
WeChat	49	2%	4
Q5. Email Application			
Gmail	1597	87%	1
Yahoo Mail	213	12%	2
Outlook	8	0%	3

Table 2 shows the presentation of the common Online Learning Platform Tools that has to determine if the respondents recognize and use this tool on their daily activities such as learning management system, social media platform, video conferencing, instant messaging, and email application. Most of the respondents selected the Google Classroom LMS with a total of 1529 or 72% followed by Microsoft Teams with 199 or 9% and the lowest is Blackboard LMS with a total of 72 or 3%. This means parents or guardians recognize this tool and they are interested to have an access to their child's calendar, class timetable, activities, outlines, and assessment dates.

In social media platforms, Facebook got the highest option with a total of 1614 or 62% followed by Pinterest with a total of 78 or 3% and the lowest is LinkedIn with a total of 43 or 2%. For the instant messaging tool, most of the respondents uses FB Messenger 1621 or 82% which means the respondents' option in using social media was Facebook and Messenger as the most common tool for sharing information and making connections with others.

In video conferencing, most of the respondents option using Google meet with a total of 1499 or 54% followed by ZOOM video conferencing with 1031 or 37%. For email applications, Gmail is the most popular choice by the respondents with 1597 or 87% followed by Yahoo Mail with 213 or 12%. The majority of the respondents selected the most accessible and popular tools that they need when it comes to sharing information and data communications for learning.

Presentation of the Parents Assessments in Familiarity with the Online Learning Platform Tools

Table 3. Level of Familiarity with the Online Learning Platform

Category(s)	Mean	Percentage (%)	Interpretation
Q1. Learning Management System			
Google Classroom	3.09	25%	Familiar
Microsoft Teams	2.03	17%	Somewhat Familiar
Moodle	1.56	13%	Somewhat Familiar
Blackboard	1.95	16%	Somewhat Familiar
Canvas	1.78	15%	Somewhat Familiar

Q2. Social Media			
Platform			
Facebook	3.68	25%	Highly Familiar
LinkedIn	1.64	11%	Somewhat Familiar
Pinterest	1.84	13%	Somewhat Familiar
Q3. Video Conferencing			
Google Meet	3.24	23%	Familiar
Microsoft Teams	1.96	14%	Somewhat Familiar
Blackboard Collaborate	1.63	11%	Somewhat Familiar
Zoom	3.01	21%	Somewhat Familiar
TeamViewer Meeting	1.52	11%	Somewhat Familiar
Q4. Instant Messaging			
Messenger	3.68	30%	Highly Familiar
Viber	2.06	17%	Somewhat Familiar
WhatsApp	1.85	15%	Somewhat Familiar
WeChat	1.69	14%	Somewhat Familiar
Q5. Email Application			
Gmail	3.42	29%	Familiar
Yahoo Mail	2.48	21%	Somewhat Familiar
Outlook	1.61	14%	Somewhat Familiar

Table 3 shows the presentation of the mean of the Level of Parents Assessment in Familiarity with the Online Learning Platform tools. Google LMS rated the highest with a mean of 3.09 and interpreted as Familiar. Facebook Social Media Platform rated with a mean of 3.68 and interpreted as Highly Familiar. Google Meet video conferencing was rated with a mean of 3.24 and interpreted as Familiar. For instant messaging tool, Messenger rated the highest with a mean of 3.68 and interpreted as Highly Familiar. Lastly, Gmail application was rated with a mean of 3.42 and interpreted as Familiar.

Table 4. Needs Assessment with the Online Learning Platform

Category(s)	Frequency (<i>n=1634</i>)	Rank
Learning Management System	948	1
Social Media Platform	65	4
Video Conferencing	524	2
Instant Messaging	23	5
Email Application	74	3

Table 4 presents the needs of the participants with the Online Learning Platform program. The table reveals that the Parents of the Students of the College of Information Technology and Computer Studies' highest needs were: LMS with a total of 948 followed by the Video Conferencing tools with 524. However, there is only a moderate need is training in the use of Instant Messaging tools because some of the parents are familiar with the communication tools.

Presentation of the Parent's Overall Experience in terms of the Implementation of Flexible Learning

Table 5. Needs Assessment in the Overall Experience of the Respondents

Category(s)	Mean	Interpretation
Quality of Internet Connection	2.98	Satisfied
Quality of the Device Used	3.05	Satisfied
Quality of an Online Learning Platform Used	3.14	Satisfied
Student Interaction via Online Learning Platform	3.17	Satisfied
Quality of Attentiveness of the Student	3.22	Satisfied
Overall Mean	3.11	Satisfied

Based on the results, the respondent's parent or guardians' overall experience is important to conduct training and to establish their quality of internet connection at home to support the learning of their students in the Synchronous learning including the device used and familiarity on how to operate the Digital Learning Platform. Therefore, parenting or parent involvement in student learning is a very important and challenging role for the Parents of the Students of CITCS.

The Digital Platform training program can also be beneficial with regard to the parents' needs although it takes time and effort in planning and execute this challenging role for the parents. Moreover, the result reveals that the overall mean was rated 3.11 and interpreted as Satisfied but the sustainable proposed program should always be according to the needs of the respondents.

Conclusion

Most of the respondents are 41 years old and above, married, and employed. The participation of the beneficiary of this study has a great factor in determining the need to prioritize the topics

that they will be interested to attend. This ensures that participants are motivated and interested in the Online Learning Platform tools.

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