Students' Holistic Formation in X Community College: Extent of Technology Usage

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Abstract

This study attempts to determine the extent of technology usage for student's holistic formation of second year college students from five college courses of X College, Academic Year 2021-2022. This paper utilizes a quantitative method employing an online descriptive-correlation design. The extent of technology usage showed most of the time in Messenger, Google, and smartphone while sometimes only in Facebook, YouTube, Instagram, and laptop computer but never in tablet computer. In terms of the holistic formation in technology the overall results show that technology has a huge contribution on the holistic formation of the respondents as indicated by the overall mean. The indicator "morally upright" got then the highest overall mean rating described as most of the time while the indicator physically robust got the lowest overall mean rating described as sometimes. The respondent's level of holistic formation in technology in terms of the respondents' profile showed significant in family monthly income and attitude towards technology access. It is noted that technology offers a huge contribution to the holistic formation of the respondents with a morally upright indicator as highest and least was being physically robust.

Keywords: Correlational Study, Students' Holistic Formation, Technology Device, Technology Usage

INTRODUCTION

Technology has been instrumental in all of these because in searching for the good life, people were able to come up with creations that would make life easier, more comfortable, and more enriching. However, with technology, people are becoming more concerned about their holistic well-being. News forecasts cases like suicide, rape, killing of one's own family, etc. Student abused became rampant with the use of information and communication technology.

Character development has become a topic among college administrators, faculty professionals and staff, parents, and students. However, most research claims that character development is made possible only if other factors like moral, physical, social, and spiritual are incorporated into the holistic formation of college students.

There is a lack of data measuring the impact and efficacy of factors that might support the development of well-being in tertiary education. A better understanding is needed on how young people grow and develop holistically in the surge of technology in their life as a student in areas such as values and character to better assist them in developing into young adults who lead positive productive lives that contribute to society.

The term generation gap is attributed mainly to the changes brought about by technology. Although the original idea is for technology to help everyone, it cannot be denied that until

today, not everyone is comfortable using the different kinds of technologies. Mostly those who belong to the older generation think that these technologies are too complicated to operate. They have been used to simple living in the past and these available technological devices, though very appealing, are a difficult puzzle to them.

As teacher-researchers, the scenario of the students using technology for school purposes transforms the students, directly and indirectly, the living practices, social areas including mentalities. Subtle changes in sharing information because of the use of the internet and mobile devices occur dramatically. Researchers affirmed that technology especially social media applications which emerged greatly in this period have had impacts on a variety of areas.

It is said that digital literacy should be taught to students at a young age (Gonzales, 2018). Software coding in the curriculum would allow students to learn modern skills that could be used in future careers. Digital literacy can elevate the educational competencies of students and the economic competitiveness of the Philippines. To produce a digital-savvy graduate who will be equipped with the skills necessary to succeed in the modern world, the key is to start training in coding and other computer skills at an early age.

Southeast Asia is one of the most internet-addicted regions on the planet, with the Philippines topping the global list with an average of 10 hours and 2 minutes of screen time every day (Lamb, 2019). With the onslaught of the pandemic Covid-19, on the second day of the implemented lockdown over Luzon, internet users in the Philippines were feeling quite hot and bothered. Research shows that website traffic for Pornhub.com in the country increased to 2.3 million- the highest spike since early this year (Ortiga, 2020).

Objectives

This study aims to determine the extent of technology usage for the holistic formation of X college students, School Year 2021- 2022. Specifically, this study seeks to answer the following questions:

1. What is the profile of the respondents?
2. What is the extent of technology usage?
3. What is the level of holistic formation in technology in terms of: morally upright; emotionally adept; aesthetically aware; socially responsible; physically robust; and intellectually nimble?
4. Is there a significant relationship between the respondent's level of holistic formation in technology and the respondent's profile?

Hypothesis

Problem 1 is hypothesis-free. On the bases of problems 2, 3 and 4, the following null hypotheses were formulated and tested at 0.05 level of significance.

Ho1: There is no significant relationship between the respondent's level of holistic formation in technology and the respondent's profile when grouped according to: sex; age; sibling position; college course; family monthly income; parent's occupation; parent's educational attainment; and attitude towards technology access.

METHODS
Research Design

This study uses online descriptive- correlational survey method of research. It is the most appropriate design to gather information about the extent of technology usage for holistic formation among students in X Community College which involves the description, analysis, and interpretation of the different variables related to the study. Descriptive research involves extensive observation among the respondents in terms of morally upright, emotionally adept, aesthetically aware, socially responsible, physically robust, and intellectually nimble. Its goal is

the acquisition of accurate data that can be used in average, frequencies, and other statistical calculations. It is mainly done to describe the data and characteristics of what is being used in sampling.

Respondents

With the onslaught of the pandemic COVID-19, the respondents in the study were given instructions in the Google Form online. The respondents were the 457 college students at X Community College namely: Colleges of midwifery, education, hospitality management, engineering, information technology and business administration during school year 2021-2022. This study employed the purposive sampling method since the researchers focused on reaching all second-year students in every sample college that are selected. Since the students are already in their second year of residency in X Community College.

Research Instrument

After a thorough review of different literature, the researcher, with the guidance of the adviser and expert panelists examined critically the questionnaire. Several revisions were made to suit to the cultural condition of the college institution as the target respondent of the study. It was modified to suit to the variables investigated in this study. The questionnaire has three parts. **Part I** obtained the respondent's profile, namely: age, sex, sibling's position, college course, family monthly income, parent's occupation, parent's highest educational attainment, and attitude towards technology access. In the attitude towards technology access variable, six (6) indicators were made by the researcher. **Part II** gathered data on the extent of technology usage which is categorized into two namely: (a) social media sites: Messenger, Google, Facebook, Youtube, and Instagram; (b) technology devices: smartphone, laptop computer, and tablet computer. Further, five (5) indicators were created in each of the extent of technology usage to answer the problem. **Part III** determined the holistic formation in technology of college students in terms of morally upright, emotionally adept, aesthetically aware, socially responsible, physically robust, and intellectually nimble. Eight indicators are formulated in each of the sub-variables.

The tests consisted of eight (8) indicators in each variable that measures the characteristics and behaviors associated with the use of technology. Questions are weighted in a four-point Likert scale that ranges from 1= never; 2= sometimes; 3= most of the time; and 4= every time/ at all times behavior. Scoring is gathered by summing the total ratings answered by the participant/s. The maximum score is 100 points.

Validation of Instrument

The questionnaire is personally created by the researcher and modified by the researcher's adviser based on the given statement of the problem and then simplified lastly by the panelists. The researcher simplified the items of the questionnaire to suit the needs of the respondents of the study. This would help achieve the desired outcome of the study.

To ascertain the validity and reliability of the questions made, the researcher consulted the instructors of the College of Information Technology at Tagoloan Community College. Thus, it helped in finalizing the format and content. The suggestions and recommendations of the panelists were taken into consideration for the final presentation of the instrument.

Data Collection

The data was collected via online survey on students' holistic formation namely: morally upright, emotionally adept, aesthetically aware, socially responsible, physically robust, intellectually nimble and the extent of technology usage.

Data Analysis

Descriptive statistics such as mean, percentage, standard deviation, frequency count, and rank are used to describe the variables such as sex, age, sibling position, college course, family monthly income, parents' occupation, parents' educational attainment, and attitude towards technology access. Pearson-r was used to determine if a significant relationship existed between the respondents' extent of technology usage for holistic formation among students of X Community College.

Ethical Consideration

The objective, procedures, respondents' selection, potential risk, potential benefits, confidentiality pledge, conflict of interest of this research are clearly laid down to the respondents. The respondents are given inform consent and certificate of confidentiality to ensure rights and privacy of the respondents which are indicated in the Data Privacy Act of 2012. The respondents are given freedom to answer the questionnaire and withdraw anytime if the respondents wish to. The researchers assure the confidentiality of the validation of the respondents. All the pertinent documents related to data gathering are shredded and deleted information from computer after the study is completed.

RESULTS and DISCUSSION

The following quantitative tables are presented and discussed comprehensively in this study. Table 1 and 1.1 and discusses the distribution of the demographic profile of the respondents table 2 presents the attitude towards technology access, table 2 Summary of Respondents' Extent of Technology usage on Social Media Sites table 3 Summary of Respondents' Extent of Technology usage on Technology Devices, table 4 Summary of the Holistic Formation in Technology.

Table 1
Distribution of Demographic Profile of the Respondents

Sex	f	P	R	age	f	P	R	PO	f	P	R
Male	128	28.01	2	20 & below	219	47.92	1	Blue collar job	64	14.00	2
Female	329	71.99	1	21-22	95	20.78	3	White collar job	393	86.00	1
				23 & above	143	31.29	2				
Total	457	100%			457	100 %		Total	457	100%	

Legend: f- frequency   PO- parents occupation
                 P – percentage   R- rank

SEX.

Most of the respondents are female because the world is dominated by women according to Philippine Statistics Authority (2020). It implies that women are more motivated to study than men.

Table shows the respondents' profile in terms of sex and data show that 329 (71.99%) are female while 128 (28.01%) are male. The total **frequency** of 457 means that many students are active in the engagement of online classes in the second year level using the technology devices.

The implication is that students of the 21st century of Tagoloan Community College are more adept in terms of digital literacy. This implies that students are now ready to face the demands of globalization. Technology has made this participation easier than for past generations. According to Espinosa (2016), for millennials (born between the years of 1979 and 2001), there is no life before computers or the Internet. As a by-product of being reared in a culture of speed, technology, and choice, they are savvy early adopters who quickly master whatever new programs that come to the market. Growing up with the internet has exposed millennials to an entire global community and increased their awareness of news and world events. Millennials have numerous ways to readily learn about world affairs, and it can be argued that this facility has made them not only more aware but also more involved. More than one-third (37%) of survey respondents stated that natural disasters have had a significant influence on their involvement with their community.

Females got the **highest frequency** of 329 (71.99%). The implication of this data means that majority of the respondents are female. The highest frequency shows females simply because of their coping mechanism which is already embedded in their physiology according to the Philippine Psychological Association. Moreover, Olivia Remes (University of Cambridge) explained that individuals with this sense of coherence, with good coping skills, view life as comprehensible and meaningful. In other words, they feel they can manage their life and that they are in control of their life, they believe challenges encountered in life are worthy of investment and effort, and they believe that life has meaning and purpose.

Males got the **lowest frequency** of 128 (28.01%) in terms of participation in this study. The implication is that males do not likely to participate in a survey conducted by the researcher. Also, in the total population of students in the school year 2020-21, women are the majority that comprises the whole population of Tagoloan Community College. In the study conducted by Julia Lawrence (American Psychological Association), results revealed significant differences between males and females in terms of engagement in coping strategies and academic attainment. Specifically, males who exhibited greater ability to detach themselves from the emotions of a situation were more inclined to demonstrate emotional inhibition or bottling up of emotions. Also, it was observed that females attained a significantly higher level than males.

According to the study conducted by the Guidance Office of Tagoloan Community College it shows that majority of drop-outs are male due to absences, delinquent behavior inside the campus, and inadequacy to adapt to new policies implemented in their academic life which is why the lowest frequency are males. Data from this office shows 304 (67.71%) female students, compared to 145 (32.29%) male students for A.Y. 2020-21 of Bachelor of Elementary Education second-year level.

AGE

Most of the respondents are K-12 recipients because our educational system applies no child left behind policy and even leniency given to students as pleaded by the Commission by Higher Education as stated in CHED COVID-19 ADVISORY No.6 of 2020 which states that the exercise of the maximum consideration shall be accorded to students. It implies that everyone is given equal chance in education.

Table shows the respondents' profile in terms of age and data show that 126 (27.57%) are 20 years old while only 10 (2.19%) are 26 years old. This means that many of the respondents are 20 years old. The data imply that 20-year-old students in the second-year level remain nurtured or encouraged not just by their family but also by the faculty of the institution. The sense of belongingness is already inculcated in their heart and mind as TCCian thus, they remain in the school. Data show that there are 400 (89.09%) single second-year students out of the 449 who enrolled in the second-year level whose ages are from 19- to 23-year-old as conducted by the Guidance and Counseling Office of Tagoloan Community College.

The **lowest frequency** is 26 years old because most of the students in this age are married already as shown in the student's profile of the Guidance Office of Tagoloan Community College. The implication is that these 26-year-old students are working mother or father but still has the hope to graduate from college. These individuals want to finish their baccalaureate degree even if married already because they believed that it is only through education that they could land a good or decent job and support their family. For instance, data shows that out of 449 (total population) second-year students of Bachelor of Elementary Education students A.Y. 2020-21, 49 (10.91%) are married.

PARENTS OCCUPATION

Most of the parents' occupation of the respondents are categorized into white collar job because the status or their parents are coming from far-flung areas which lead them not finishing education. According to Philippine Statistics Authority (PSA), 2021 the country's unemployment rate is estimated at 6.5 % since January until November of the same year. It implies that getting the job is quiet challenging amidst the pandemic.

Table shows the respondents' profile in terms of parent's occupation and data show that among their fathers, 92 (20.13%) are farmers. This implies that many of the fathers of the respondents are working as farmers at the **highest frequency** in agricultural land. The implication for this is that majority of the students of Tagoloan Community College live or reside in nearby municipalities like Villanueva, Jasaan, Balingasag, Claveria, and Bukidnon. These Municipalities are considered agricultural land areas for their vast fertile land. According to the data, elementary level is their father's educational attainment as shown in the next table. This implies that farming is their last resort as means to earn a living. According to PSA, the poorest regions in the country are in the rural and agricultural areas particularly on the island of Mindanao, a region that has also served as a battleground for Muslim militants and government forces for decades. The region suffers from poor infrastructure and inadequate basic services, such as health and education, poor local governance, and a weak private sector. Armed conflicts cause severe economic or loss of source of income and social displacement. Being a teacher got the **lowest frequency** of 2 (0.44%). This implies that it is still in the Philippine culture that men are not attracted of the teaching profession. Also, majority of men do not have the patience to mold the minds of today's generation. They hate to go on details. According to the data, men prefer to be farmer rather than teaching. Philippine Statistics Authority, data reveal that five of the nine basic sectors of the population determined by the PSA- farmers (34.3%), fishers (34%) and children belonging to families with income below the official poverty threshold (31.4%) for the year 2015. Farmers and fishers have consistently registered as the two basic sectors with the highest poverty incidence in the general population since 2006.

On the other hand, among the mothers of the respondents, 197 (43.11%) are housewives while only one (1) or 0.22% is a mechanic. Being a housewife got the **highest frequency** as a role of the mother. The implication is that genetically, Filipino culture dictates that mothers are best models in terms of taking good care of the family, maintaining cleanliness at home, and cooking good food. Also, many of the mothers of the respondents are staying at home and mother their children. Being a mother is already embedded in the physiology of Filipino women. Most of these mothers belong to the 4th generation of women that depends only on the decisions made by men. Unlike women nowadays who belong to the 5th generation who works side by side with men or equal of men already. According to Wikipedia (2018), the Philippines is described to be a nation of strong women who directly and indirectly run the family unit, businesses, government agencies, and haciendas.

Being a mechanic got 1 (0.22%) frequency and the **lowest frequency. The implication is that** this job is only attractive to a few women and majority to men. This job requires physical strength and would force the laborer to go down and dirty depends on the location or area of the

work. According to TESDA, women enrolled a short-course such as mechanic simply because their family members are mechanics.

Table 1.1 continuation of the demographic profile of the respondents

Name of the College Courses	f	P	R	PEA	f	P	r	FMI	f	P	R
College of Education	71	15.54	3	EL	148	32.38	2	3,999 and below	248	54.27	1
College of Midwifery	70	15.32	4	HSL	187	40.91	1	4,000-6,999	98	21.44	2
College of Hospitality Management	100	21.88	1	CL	74	16.19	3	7,000-9,999	40	8.75	3
College of Business Administration	94	20.57	2	CG	43	9.41	4	10,000-12,999	33	7.22	4
College of Information Technology	67	14.66	5	ML	3	0.66	5	13,000-15,999	8	1.75	6
College of Engineering	55	12.03	6	DL	2	0.44	6	16,000 and up	30	6.56	5
Total	457	100%		total	457	100%		Total	457	100%	

Legend: f- frequency   FMI- family monthly income   EL- elementary level

P – percentage   PEA- parents educational attainment   HSL- high school level
R- rank   CL- college level   CG- college graduate
                         ML- master level   DL- doctorate level

COLLEGE COURSES

The dominant courses are hospitality management, business administration, and education because these are actively participating the online survey. These are the offered courses of the X Community College. It implies that since the respondents are availing free education, the choices are limited.

Table shows the respondents' profile in terms of college course and results reveal that 100 (21.88%) are enrolled in the College of Hospitality Management and 55 (12.03%) are enrolled in the College of Engineering. This means that many of the respondents who took part in this study are students from the College of Hospitality Management. This survey was given to the second-year students of five (out of nine) intended College courses. The College of Hospitality Management got the **highest frequency. The implication is that** the majority of the students in this College are required by their Dean to own a smartphone or laptop computer in this pandemic COVID-19 to attend online classes and which enables students to answer the researcher's survey in Google form in just an hour. Due to the onslaught of the pandemic COVID-19, students and teachers rely too much on the use of smartphone or laptop computers. From the data gathered by the researcher, majority of the parents of these students are working as government or private employees which afford them to buy technology devices such as smartphones or laptop computers.

On the other hand, the College of Engineering got the **lowest frequency** 55 (12.03%). The implication is that majority of the students are coming from a low-income family and only a few can afford to buy the gadgets according to their Dean. Aside from that, the College of Engineering curriculum is more on the psychomotor domain instead of the cognitive or affective domain according to Bloom's taxonomy which requires students to have classes more on hands-on or practical skills/ abilities to be developed. There are two programs under the College of Engineering: (1) Automotive Technology and (2) Electronics Technology. These two programs

require students to practice their skills in the field rather than in the classroom setting according to their Dean .

Table 2
Summary of Respondents' Extent of Technology usage on Social Media Sites

Indicators	Mean	SD	Description
Messenger	3.10	0.809	Most of the time
Google	2.90	0.813	Most of the time
Facebook	2.40	0.888	Sometimes
YouTube	2.41	0.884	Sometimes
Instagram	1.87	0.854	Sometimes
Overall	2.54	0.850	SOMETIMES

Legend: **3.41**-4.00   All the time   1.81- 2.60   Sometimes
          2.61-3.40   Most of the time   1.00- 1.80   Never

Table shows the summary of respondents' extent on the use of social media sites and data show that they used social media as indicated by the overall mean of 2.54 (SD=0.850) which is described as sometimes. The implication is that students sometimes used social media in most of their time. Researcher's insight is even though social media plays a very important role in every student's life the data show that they are utilizing it on a not-so-frequent occasion. The fact that it is often easier and more convenient to access information, provide information and communicate via social media but in the context of this study, they only use it sometimes. Further, students and teachers can be connected and can make good use of these platforms for the benefit of their learning and teaching. Majority of the respondents of this study are working as part- time to support or to make both ends meet in their own family.

According to a literature published by Mc Graw Hill (2015), one reason social media is so popular is that it allows people to personalize the way they experience and interact with the Web. Tools like Facebook, Twitter, and Instagram used to be almost exclusively used to take a break from academics, but social media is increasingly being leveraged as a study tool, especially for today's tech-savvy students. With the right strategy, social media can make studying more collaborative and efficient. The social media *"messenger"* was rated highest with a mean of 3.10 (SD=0.809) which is described as *most of the time*. The implication is that the respondents primarily used messenger as a social media application. Researcher's insight is that students use messenger to discuss a range of topics, and even help classmates and even friends understand things that might confuse them. Indeed, the messenger chatting with peers online can help young people to discuss homework or ideas from school they didn't understand and talk to a friend about something that's happened at school. Students at X Community College used messenger most of their time because it is easily accessible for them, and they use it as their way of communicating to their loved ones, friends, and others.

According to Kanna (2019), it depends on the individual whether one prefers to use Messenger over Instagram. For wherever one goes, one should have good friends and well-wishers to message. If one's friends and family members are available on Facebook, then it means that one should prefer to use Messenger rather than Instagram. Both Instagram and Messenger provide a video and normal calling option for their user. Both support video and image sharing options in chat. But Messenger has lots of filters and editing effects options over Instagram. Moreover, in Messenger one will have lots of free games and instant push notification of the latest news update, astrology tips, sports score from industries best websites.

The social media "*Instagram*" got the lowest overall mean rating of 1.87 (SD=0.854) which is described as *sometimes*. The implication is that of all the social media apps mentioned above, Instagram was the least choice or used among the respondents. Researcher's insight is that

Instagram was not well received by the respondents and in fact, they are not usually using it in their day-to-day personal and student life. Although, Instagram is the best social media platform for engagement or your ability as a brand to connect with your followers. It's visual, simple and it's attracting the younger generations more than other social media platforms. Instagram can go beyond just visuals, but this is not attractive for the respondents.

According to Ellis (2018) the respondents are not all the time using Instagram as their form of communicating with people around. A lot of it boils down to the motives of each person using each site. When it comes to its marketing effectiveness, Instagram places more emphasis on discovery and observation and less on interaction. Particularly for Millennials, Instagram is seen as a style resource, an ideal place for learning new trends and discovering new artists, as well as keeping up with their favorite celebrities.

May 2016 data shows that more Millennials use Instagram than Facebook in terms of following their favorite celebrities and fashion. Facebook tries to be more about personal interactions and sharing content with people with whom one has more intimate connections. For instance, Instagram engagement as shown on the next table is high but the conversation is low.

Moreover, one can add stories on Instagram and Messenger, but Instagram nowadays has lots of new features including Q and A, rating, gif, mention, hashtag, music adding, and more. Chatting via Instagram can be a better option than chatting on Messenger when it comes to its functionality, clean UI (User Interface), and ability to unsend a text from both sides whereas Messenger has the advantage to be used on both web (pc: for all messenger app features) (mobile: for basic texting) and after all Messenger provides a lot more customization options such as games, nicknames, chats colors, etc.

Table below shows the summary of the holistic formation in Technology and the overall results show that technology has a huge contribution to the holistic formation of the respondents as indicated by the overall mean of 2.69 (SD=0.796) which is described as most of the time. The implication is that technology indeed contributes to the holistic formation of the students. Researchers' insights are that to keep students abreast with the fast-changing world, they must realize how important is technology in shaping their future. There might be several disadvantages of using technology but when used judiciously to improve and update themselves and help them in their daily student life, the power of technology can be overwhelming. As technology becomes increasingly prevalent in the education system and workforce, students need to become familiarized with various digital applications.

According to the literature published anonymously from the Education Technology publication (2020), states that technology ensures that a student having difficulties can have the supportive intervention they require at the earliest possible moment. Sometimes all that is required is simply asking someone how they are or if they need help. And technology ensures there are more touchpoints to do this than ever before. It is safe to say that technology plays a vital role in student well-being and mental health and this role is only going to grow as technology evolves. It's a brave new world that humanity is living in, and tech can help all feel a little braver.

In particular, the indicator *"morally upright"* got then the highest overall mean rating of 3.08 (SD=0.840) described as *most of the time*. The implication is that the respondents are using technology while staying morally upright in their decisions made. Researcher's insight is that every action a student takes leaves a trail of information that could, in principle, be recorded and stored for future use. Hence, when it becomes negative, the students will regret their decisions. Therefore, students need to take extra care on their social media activities because they might end up regretting why they have done something which they did not consider their moral conscience. Technology ethics are principles that can be used to govern technology including factors like risk management and individual rights. They are used to understand and resolve

moral issues that have to do with the development and application of technology of different types.

According to McGilvery (2018), the acronym TECH SMART as an option for helping students navigate the ethical waters of their digital world. TECH SMART stands for: Take care of technology equipment, explore appropriate and safe sites for learning, Copyright law, Help prevent cyber-bullying, Self-image is important, make use of netiquette, always give credit to original source, remember to be ethical digital creators, and think. The rapid pace of technology advancement makes it challenging for people to evaluate the ethical ramifications of their actions in the digital space. Understanding ethical issues of technology in the classroom and remembering TECH SMART helps students become ethical citizens in a digital world.

On the other hand, the indicator *"physically robust"* got the lowest overall mean rating of 2.41 (SD=0.668) which is described as *sometimes*. The implication is that the respondents are using technology and become physically robust individuals. Researchers insight are technology can positively impact not only students' mental health but their physical wellness as well. Although, reports have also shown that social media and mobile devices may lead to psychological and physical issues, such as eyestrain and difficulty focusing on important tasks. They may also contribute to more serious health conditions, such as depression and anxiety. In the case of the respondents, they may use technology as their way to become physically fit and healthy. Hence, it is up to the person how they positively use technology.

According to Webb (2017), social media can be used without causing oneself psychological distress. Common sense dictates as well as research that the recommended amount of time people should spend on social networks is around half an hour per day. As with many other potential ills in life, it's all about moderation. Also, as humanity is facing the pandemic COVID-19 which affected the lives of humanity, right now, people are vulnerable to infectious diseases, people age, and get a whole lot of diseases that stem from that. Once people mastered nanotechnology and can create things at the same scale that nature does but with more precision and with actual intent rather than random chance, humanity can come up with an alternate design for the human body that is far less susceptible to these diseases. Also, the use of less energy. more efficient, and more easily manufactured sources of energy are possible once humanity mastered nanotechnology.

Table 3
Summary of the Holistic Formation in Technology

Indicators	Mean	SD	Description
Morally upright	3.08	0.840	Most of the time
Emotionally adept	2.80	0.841	Most of the time
Aesthetically aware	2.46	0.822	Sometimes
Socially responsible	2.60	0.845	Most of the time
Physically robust	2.41	0.668	Sometimes
Intellectually nimble	2.80	0.761	Most of the time
Overall	2.69	0.796	Most of the time

Legend: 3.50-4.00 At all-time 1.50-2.49 Sometimes
2.50-3.49 Most of the time 1.00-1.49 Never

Table 4 below shows the relationship between respondents' level of holistic formation in technology and their profile. It can be gleaned from the table that the respondents' family monthly income, as well as their attitude towards technology access, show a moderately significant relationship as indicated by the correlation and probability value less than 0.05 which led to the rejection of the null hypothesis. The implication is that as the respondent's family monthly income and attitude towards technology gets higher, then it would have a linear effect on the improvement of the respondent's holistic formation with the use of technology.   This implies that students need to have a positive attitude towards the use of technology because it would have an impact on their holistic formation. For instance, students have common problems with the use of google classroom or e-learning that requires a lot of time and intensive work. The researchers' advise is for students to have time management.

According to Caoili-Tayuan & Eleazar (2019) a regular schedule planner would be a significant help to these learners, as they could even set reminders for their courses and assignments. The fact that positive attitudes toward technologies are positively correlated with overall social well-being, is also beneficial for the mental and physical well-being of the student. Hence, schools' technology education must prepare students to understand, control, and use technology. Students need to learn how to adapt to technological change and how to deal with forces that influence their lives and potentially control their future.

Although, family monthly income is out of the control of the respondents, and therefore parents must work hard to improve their family monthly income because it may also affect the holistic formation of students with the use of technology. Not all parents can afford to buy technology for their children but when planned and prepared especially today that using technology is very important for online flexible learning, parents may find ways on how to secure one for their children. Schools may also give those poor but deserving students freeload, smartphones or tablets or even laptop computer if their budget warrants to save those students who cannot join online classes because they do not have their gadgets. In tertiary education, the government through Tertiary Education Subsidy (TES) provides monetary allowance every semester that would be used by students to buy smartphone or mobile devices. However, this program is only granted to deserving but financially challenged students or given only to the poorest of the poor.

Variables which are not significant are namely: sex, age, college course, parent's occupation, and parent's educational attainment.

Table 4

Relationship between the Respondents' Level of Holistic Formation in Technology and Their Profile

Respondents' Profile	Student's Holistic Formation Indicators						OVERALL Pearson-r p-value
	Morally Upright Pearson-r p-value	**Emotionally Adept** Pearson-r p-value	**Aesthetically Aware** Pearson-r p-value	**Socially Responsible** Pearson-r p-value	**Physically Robust** Pearson-r p-value	**Intellectually nimble** Pearson-r p-value	
Sex	0.102 (WPR)	0.031 (NLR)	0.031 (NLR)	0.036 (NLR)	0.027 (NLR)	0.068 (NLR)	0.019 (NLR)
	0.290 NS	0.508 NS	0.509 NS	0.510 NS	0.571 NS	0.149 NS	0.678 NS
Age	0.043 (NLR)	0.045 (NLR)	0.062 (NLR)	0.054 (NLR)	0.031 (NLR)	0.059 (NLR)	0.020 (NLR)
	0.354 NS	0.339 NS	0.188 NS	0.247 NS	0.502 NS	0.210 NS	0.672 NS
Sibling's Position	0.048 (NLR)	0.086 (NLR)	0.107 (WPR)	0.057 (NLR)	0.111 (WPR)	0.083 (NLR)	0.100 (WPR)
	0.305	0.067	0.220	0.224	0.180	0.078	0.320

	NS	NS	NS	NS	NS	NS	NS
College Course	0.114 (WPR) 0.723 NS	0.426 (WPR) 0.167 NS	0.042 (NLR) 0.898 NS	0.156 (WPR) 0.628 NS	0.013 (NLR) 0.967 NS	0.151 (WPR) 0.639 NS	0.253 (WPR) 0.428 NS
Family monthly income	**0.530 (MPR) 0.001* S**	**0.574 (MPR) 0.004* S**	**0.528 (MPR) 0.0014* S**	**0.531 (MPR) 0.002* S**	**0.619 (MPR) 0.033* S**	**0.508 (MPR) 0.046* S**	**0.540 (MPR) 0.011* S**
Parents Occupation	0.114 (WPR) 0.723 NS	0.426 (WPR) 0.167 NS	0.042 (NLR) 0.898 NS	0.156 (WPR) 0.628 NS	0.013 (NLR) 0.967 NS	0.181 (WPR) 0.574 NS	0.155 (WPR) 0.631 NS
Father Educational Attainment	0.002 (NLR) 0.975 NS	0.016 (NLR) 0.781 NS	0.004 (NLR) 0.947 NS	0.014 (NLR) 0.806 NS	0.010 (NLR) 0.869 NS	0.018 (NLR) 0.761 NS	0.094 (NLR) 0.104 NS
Attitude towards Technology Access	**0.583 (MPR) 0.001* S**	**0.564 (MPR) 0.001* S**	**0.527 (MPR) 0.001* S**	**0.563 (MPR) 0.001* S**	**0.587 (MPR) 0.001* S**	**0.588 (MPR) 0.001* S**	**0.569 (MPR) 0.001* S**

Legend: *significant at p<0.05 alpha level   S – significant   NS – not significant

Pearson-r Values	Description	Pearson-r Values	Description
0.00 – 0.09 Relationship (WPR)	No Linear Relationship (NLR)	0.10 – 0.49	Weak Positive
0.50 – 0.69 Relationship (SPR)	Moderately Positive Relationship (MPR)	0.70 – 0.99	Strong Positive
1.00	Perfect Linear Relationship (PLR)		

Conclusion

Based on the findings of the study, the conclusion is drawn:

The internet has already transformed the individual's world and social media and the sense of identity. The technology is addressed to investigate the impact on the students' holistic formation. It is affirmed in the study to produce a safe and secure environment were all can learn without anxiety. Therefore, students are learning and studying differently. The impact of technology on the holistic formation of students provides opportunity to learn with the advent of technology.

Recommendations

Considering the above findings, the following recommendations are hereby forwarded:

1 .For the Department of Education and Commission on Higher Education officials, technology education should be conducted in schools across all levels so that students will know the proper usage of social media and technology devices and develop a positive attitude towards technology usage.

2. For the President and Vice-President of Academic Affairs of X Community College, COVID-19 pandemic offers a big challenge for schools, educators, and the students themselves. Hence, schools may provide opportunities for students to continue their education using flexible learning modalities. Free loads, smartphones, and tablets may be provided for deserving students who really cannot afford to buy one. Also, with online learning being accepted into school as part of the teaching and learning methodology, one of the things that schools need to consider is **monitoring** and **management.**

3. For instructors or teachers, motivating our students to do online learning is a major challenge. As instructors, students need help to find the motivation to follow the new educational trends. Hence, it would properly equip themselves for future challenges in their education and careers. Only a positive attitude will help them overcome the challenges in e-Learning. Though this is hard to practice, students need to understand that it is necessary to reap the e-Learning's benefits in the future. Also, instructors need to be trained on the effective holistic development of students in e-Learning for self-efficacy.

4.Parents need to support their children in their schooling especially on the aspect of using technology devices for technology really contribute to the holistic formation of students. They need to find ways to provide their children the needed devices for them to keep abreast with the fast-changing technological world.

5.Future researchers may undertake following the same topic but considering the perceptions of other stakeholders like teachers, school administrators, and parents for better triangulation of the data.

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