Internet Accessibility Profile and Students' Readiness Towards Online Demonstration Lectures: Basis for Intervention Plan

Oliver Ponce Ponsades

DepEd/Carmen National High School

***Abstract*—** The principal purpose of this quantitative descriptive survey research was to assess the capability of Cookery students towards blended learning by determining their internet accessibility profile and readiness for online demonstrations lectures. The participants of this study were the 50 Senior High School Cookery students at Carmen National High School currently enrolled in the first semester of S.Y. 2021-2022. Given their limited population, they were all selected as the study's respondents through the complete enumeration method. The study's results revealed that most of the students used Piso Wi-Fi Vendo and mobile broadband connections as their types of internet connection used at home. Most of them have their smartphones, usually spending one to three hours doing online activities. Meanwhile, regarding students' readiness for online demonstration lectures, the respondents have high internet self-efficacy and attitudes towards online learning. Nonetheless, the results did not deny that most students have moderate internet availability. These findings suggest that the students are initially ready and capable of blended learning in TVL classes, specifically in utilizing online demonstration lectures. This positive inclination among the respondents is evident since their strand as a vocational course requires more practical training and performance-based activities. Reading materials and modules are not sufficient to fulfill technical vocational students' practical knowledge and skills. They need supplementary instructional materials, such as online demonstration lectures, to help them appropriately demonstrate learning competencies.

***Keywords*—** Blended Learning, Carmen National High School, Cookery Students, Internet Accessibility Profile, Online Demonstration Lectures, Students' Readiness.

I. INTRODUCTION

The COVID-19 pandemic has disrupted all institutions worldwide, including the education sectors, compelling schools, and universities to cease face-to-face classes, affecting millions of students and educators worldwide. When traditional learning and teaching approaches are no longer permissible, distance learning acts as a viable alternative to continue education amid the health crisis. Many education institutions shifted from traditional classroom classes to remote teaching to mitigate the transmission of the virus and support the continuity of learning during the challenging quarantine periods (She et al., 2021).

In response to this dilemma, the Department of Education formulated the Basic Education-Learning Continuity Plan (BE-LCP) to set out guidelines for delivering education during this pandemic. Based on the initial report on the survey results conducted by DepEd, 8.8 million learners opted for modular as a method of learning delivery. Given this rationale, DepEd focused on the Self-Learning Modules (SLMs) as the primary learning strategy to accommodate all learners (Pedragoza, 2021).

Concomitantly, teaching the Technical-Vocational Livelihood track via Modular Distance Learning has posed complex and enervating issues across education sectors. This learning modality creates a severe challenge to accessing instructional-learning resources commonly found in the four corners of the classroom. The TVL courses in the K-12 curriculum aspired to prepare the learners with the fundamental competencies acquired through training and performance-based activities. Nonetheless, since face-to-face classes are not allowed, it is expected that most of these actual training will not be delivered completely. This scenario brings a central impediment for TVL teachers regarding how to level up the instruction, essential skills, and pedagogical services necessary to achieve globally competitive learners (Yabut, 2020). Not every track has made it to smoothly shift from on-site to remote pedagogy, especially for performance-based subjects like TVL and its specializations that require more than a lecture but an actual demonstration (Pedragoza, 2021).

In line with these predicaments, the researcher is compelled to investigate the capability of Cookery students towards blended learning by assessing students' internet accessibility profile and readiness for online demonstration lectures as a supplementary learning tool for distance learning. The researcher believes that this intervention could support TVL learners and teachers in effectively delivering instructions, promoting dynamic

interaction, and motivating students in their self-learning plight. Likewise, the findings of this undertaking would be a reliable basis for recommending a more action-oriented approach to modular distance learning, especially in the TVL department and its specialization courses. This endeavor will shed light on the possibilities of shifting modular instruction to a blended learning approach among public secondary schools.

II. LITERATURE REVIEW

Internet Accessibility. In this digital era, the internet has evolved into a powerful instrument for linking people, information, concepts, services, and resources. It has become a key economic variable and has created jobs, developed industries, transformed infrastructure, and provided fast communication among businesses and individuals across the planet. It has also become an indispensable tool and a requisite of the knowledge-based world today as well as an imperative way to present the latest and up-to-date news and info. The internet likewise plays an integral role in teaching, learning, and inquiry process of all educational institutions. This new type of data gathering and resources available made it plausible for people across the world to connect a virtually unrestricted abundance of information. Besides, it is also generally perceived that the internet has made it feasible for information to be eternally easy to identify, regardless of geographical location (Souvik, 2021).

With a sluggish internet access, people are less likely to be inspired to engage in the current information society. In some nations, the imperative role of internet is well comprehended, and the right to internet access as a medium of communication is recognized as an indispensable right. When it comes to allocating the country with internet access, the Philippines has been gradually catching up with other states over the past years. The country built its pioneering online connection on March 29, 1994, such breakthrough opened the doors for development, enabling Filipinos to utilize all the information the internet could provide. The Philippines was recognized the fastest improving internet population in the last half-decade with a growth of 531%. Similarly, the country has been acknowledged as the “texting capital of the globe” and the “social media capital of the world” at varying occasions over the last few

In a study conducted to assess the internet profile of secondary learners at General Emilio Aguinaldo National High School, Imus City, Cavite, it was disclosed that most of the students have a smartphone or mobile phone, followed by digital devices such as tablets and laptops. 60% of the entire student respondents have internet access at their home, where they can participate in combined blended education. Conversely, 40% of the learner respondents do not have an internet connection at home. This undertaking unveils that majority of the high school students have access to an internet connection through Wi-Fi, mobile data, and computer shop where they can explore software applications to interact in social media and online digital applications. The data reflected that learner spent an average of 12 hours per week or 1.7 hours per day for online activities; the number of hours consumed by students on social networking activities accumulated an average of 15 hours per week or 2.1 hours per day. This signifies that despite the hours they spend every week, learners can engage on social media platforms utilizing various devices they have. It also appeared that the frequently used software application available online is Facebook (Carreon, 2018).

Types of Internet Connection Used at Home. According to Iscrupe (2020), there are multiple types of internet connections that should be catered to base on your needs and usage. Types of internet connections include cable, dial-up, DSL, fiber optic, fixed wireless, and satellite. Cable internet connections are suitable for people with moderate or average usage in which activities like watching movies, listening to music, casual gaming, video calling, or web browsing are the norm for the user. For dial-ups, this type of connection is optional for people with light to moderate usage. Such activities can be casual browsing, following social media updates, managing emails, and scrolling about the latest news.

For Holslin (2022), amongst the most significant features of your home network is internet performance. Although not every single one requires the best internet available, having enough bandwidth capacity to satisfy your household's demands is critical. But to determine the nuances between different types of internet connection, the importance of the internet should be understood first. Internet connection speed is important since it determines the extent of the internet activities you can accomplish with efficiency. Internet companies offer plans with download speeds ranging from less than 1 Mbps to 5,000 Mbps, but most web users would be content with an Mbps ranging from a hundred and above. Having a decent internet connection allows you to undertake high-bandwidth activities while not having to consider slow load times, buffering, or a lost connection. You can also allow multiple users to use the same Wi-Fi and accomplish multitasking or use several Wi-Fi devices at the same time with high-speed internet.

In this way, a faster internet connection is about capacity as much as speed.

Availability of Digital Devices. Based on a data report from Data Report for the year 2021, there are 4.66 billion regular netizens as of January 1, 2021. In contrast to 2020's projections, this implies a 316 million growth every single year. Regular Active internet users are increasing at a rate of seven times greater than the global populace, which is growing at only one percent. Taking into account the fact that the planet has a population of over 7.83 billion people, means that 59.5 percent is the total internet penetration in the globe. According to the data, internet users' most frequent internet tasks are collecting information or researching: six out of ten internet users surf and explore for their needed information written online. Keeping in contact with friends and family (56.6 percent), watching and reading the new events and happenings (55.6 percent), and viewing videos, tv series, and films are the next among the most popular activities (52.5 percent) (Lin, 2021).

As stated by Kemp (2022), the up-to-date data provided by the Digital 2022 report for the usage and availability of digital devices in the Philippines revealed some interesting insights. The Philippines has a population of 111.8 million Filipinos, with 48 percent living in urban areas and the other 52 percent dwelling in rural communities. Among the total population, there are over 76.01 million netizens which indicate that the total internet penetration in the country accounts at about 68 percent. In a comparison between 2021 and 2020, there is a 2.1 million rise in new internet users. At the same time, the general speed of internet connection in the country also saw an increase in both fixed internet and a mobile internet connection, both more than a hundred percent increase. Overall, the data suggest that the majority of Filipinos are able to access the internet, and average speeds are slowly rising to adequate levels.

As per the newest Social Weather Stations (SWS) study, six out of ten Filipino learners used electronic devices for distant learning during the epidemic, with families spending roughly P8,000 per pupil. The poll, which was conducted amongst the heads of households from November 21 to November 25, indicated that 58 percent of registered Filipinos aged 5 to 20 years used remote learning gadgets. The data indicates the other 42 percent of the spectrum among students were not able to or did not. Of the 58 percent of students who used gadgets, 0.3 percent rented, 27 percent owned, 9 percent were gifted, 12 percent recently purchased, and 10 percent among students borrowed the device. Areas in Luzon had the greatest number of students with digital devices at 64 percent, while Mindanao stands at 41 percent, and the Visayas with a 43 percent score. Furthermore, the students had average spending for their devices at about P8,687, and P6,800 for the most common price bought (Inquirer Research, 2021).

Time Spent Online. Much time has gone since the inception of the World Wide Web from the confines of CERN offices. By now, online has truly revolutionized human communication and is becoming one of the most dominant forms of interaction. As years passed, the birth of social media platforms paved the way in amping up the time spent online among netizens. Social media applications like Youtube, Facebook, and WhatsApp have all amassed more than a billion users. Considering that two-thirds of the total internet use social media, they are one of the big contributors to ramping up the time spent online. Furthermore, current related literature focused on studying internet behavior shows a strong correlation between the increased amount of time spent online with the continuous rise of social media popularity around the globe (Roser, 2015).

As per a new survey, the average duration spent online has increased dramatically since the COVID-19 outbreak, and the trend shows no sign of stopping. Based on the latest research, general netizens or internet users invest a time per day of about 6 hours and 58 minutes surfing the web. Comparing the data in the past, South Africans have exceeded the Philippines in spending the most time online with an average use of ten hours and forty-six minutes. On the other hand, Filipinos spend a general amount of ten hours and twenty-seven minutes on the internet. Moreover, the integration of social media for work-related business is high, which also contributes to the high total duration of time online. Other grounds for using the internet include contacting family members and friends, following the latest news, streaming online videos like movies and TV shows, listening to music, examining products, learning in school, researching for new spots to travel, health curiosities, gaming, searching for fresh ideas, and idle browsing (Koetsier, 2020).

A lot of tech companies have recognized the problem of the drastic rise in the time spent online and on devices and utilized their own methods to treat the problem. Companies like Apple and Google tried to integrate features that provide an automatic report for the people on the time they spent surfing and the apps that consume their time. On a similar note, the other two giant social media platforms, Facebook and Instagram, rolled out new updates to their platforms that notify the users of their duration using social media and added accessibility in turning off notifications. Such initiatives of big tech companies are attributed to the rising opinion of the

masses associating a correlation between mental problems like suicide, loss of focus, diminished productivity, and depression with excessive use of technology. Yet despite these efforts of companies to reduce the usage of users, it still has steadily increased as time goes by (Molla, 2020).

On the contrary, experts say that the association of negative mental health to online and digital usage is inconsistent or still unclear. The link involving media use and cognitive health in adults and children is still incompletely defined. The literature on multitasking and memory, for example, points to a negative correlation, but a causative link has yet to be shown. Even Nevertheless, many experts and human behavior researchers are concerned about the direction in which our continual use of digital technology is leading us. With our continuous use of internet media, intelligent systems are learning even more about our psychological characteristics, with varying degrees of completeness and reliability. For example, the accelerometer on our smartphone may be used to deduce our stress levels at work, or an automated study of our speech characteristics could reveal that we're depressed (Resnick, 2019).

Students' Readiness Towards Online Demonstration Lectures. Readiness, which is critical in the educational-instruction process, is an essential element for the learning-teaching system. The student's readiness determines the learner's behavior change. Both teaching and learning can now be conducted through online media. These settings differ from those in which education is delivered face to face to both students and teachers. In this different medium, the aspect of preparedness to teach for the teacher and learn for the student should not be overlooked. Thus, the readiness for online learning through online demonstration lectures is demonstrated as time management, self-guided skill, which is inherent in online learning, adoption of internal motivational resources, acknowledgement of preferred learning style, and experiences (Engin, 2017). There are five areas pertaining to online learning readiness which are: (1) learners' motivation, (2) availability of facilities or equipment for virtual instruction, (3) students' capacity to access and utilize technology, (4) usability of online pedagogy, and (5) self-regulated e-learning (Widodo et al., 2020).

For learners to benefit from online video instruction, they must possess online readiness. Online readiness is defined as being physically and psychologically ready for online learning experience and actions. It is also regarded as the capacity to acquire the opportunities of facilitating the use of electronic resources such as the internet. Student readiness towards online learning can be operationalized as students' preparedness to respond to developments and assimilate to online education as a modern means of delivering instruction. It is relevant to venture this kind of concept as it indicates students' confidence and competence in using technological devices and the capacity to engage in self-regulated learning (Kamaruzaman et al., 2021).

Utilizing online demonstration lectures enable students to understand the information given to them through auditory and visual modalities. This type of teaching method is defined as instructional demonstrations prepared by the teacher to supplement traditional classroom instruction. The videos have the same substance and course rigor as the classroom discussions, labs, and exams but are transportable and can be learned when a learner aims to obtain knowledge. This is composed of the teacher's audio narrative and demonstration that show topic content. Simulations are encoded in video files and disseminated online, allowing learners to utilize it either face-to-face or distance learning (Sinha et al., 2014). Video demonstrations provide different student/instruction communicative features formulated to aid content delivered through various forms of both visual and auditory mediums. How media is utilized is perhaps the most vital element of video lectures because most teaching and student interaction approaches are feasible, and e-learning cannot happen without it. It contributes to the students' observation of lectures and affects how they cognitively develop knowledge disseminated to them (Mayer, 2014).

Moreover, online demonstration lecture is integral to developing education, making it adaptable to various necessities, increasing engagement, upgrading 21st-century skills, and progressing outputs. The use of video platforms is an element of change, has catalyzed how we interact, entrain ourselves, receive knowledge, and learn. It plays a critical role in learning, helping students and educators alike with its various advantages. Utilizing this instructional means suits perfectly with the modern framework transition in education, where traditional teaching approaches are being set aside in favor of dynamic or project-oriented learning assisted by multiple forms of technology. It is not difficult to comprehend why video has become a trend in education. Technology has developed at the fastest speed at this millennium, where 3.5 billion people worldwide possess a video-enabled device or smartphone. 4.5 billion individuals were active online users in July 2020. It is also widespread on social media and on-demand streaming websites. The impacts of video in education

create many advantages for its stakeholders. It enables learners to increase comprehension, improves knowledge retention, energizes students' capacity to recall competencies, increases creative and collaborative skills, supports the smooth understanding of complex lessons, and increases student outcomes and achievement status (Hejlesen, 2020).

In a study ventured by Olayemi et al. (2021) investigating the readiness of 148 undergraduate students towards online education in Nigeria, it was revealed that most of the respondents were knowledgeable with online learning with a high degree of readiness. Similarly, majority of the respondents implicated a proficient level of ICTs skills and competencies required for online pedagogy. However, the students feared the high cost of data, unstable internet services, shortages of power supply, inaccessibility to virtual library references, and restricted access to computer.

Meanwhile, in a study conducted by Kamaruzaman et al. (2021), the findings implied that students were ready for the utilization of online instruction in terms of their motivation, technological capacities, and facilities. Notwithstanding, the students perceived that they were averagely ready for the utilization of self-directed online learning. From these findings, it was suggested that teachers must use online instructional platform, like video lectures, given that the students are prepared, especially that they have sufficient facilities to assist them towards this kind of learning modality. Nonetheless, the teachers need to focus on guiding the students to accomplish their work by providing constant updates and learning materials that can aid them to upgrade their skills.

Internet Access. Technology has made an invaluable contribution to education in the twenty-first century. It has introduced numerous innovations that have simplified and broadened the learning experience for students. Most students now own cell phones, tablets, laptop computers, and other smart gadgets that aid in their learning and interaction with the society as part of its social life. When these devices are used, they have one major feature – access to the internet. The internet is a large network that allows computer devices across the world to communicate and synchronize with one another (Obligar, 2021).

Nowadays, internet problem is one of the most pressing dilemmas, especially in the Philippines. In a study conducted by Salac and Kim (2016), it was found that there has been a boundary in the availability of bandwidths in the Philippines due to the small internet providers which may also be the justification for complacency of the providers.

The Philippine Institute for Development Studies cited that the mediocre quality of internet service has become an impediment to the increasing IT-BPM industry and service sectors. It was reported that telephone services are foremost in Southeast Asian countries while mobile and broadband industry are placed second and third largest from the International Telecommunication Union. Albeit the huge cost, the international average speed for the Philippines is remarkably low and one of the inefficient in the Asia Pacific region (Abelido et al, 2021).

In a study ventured by Asio et al (2021), it was found that 65% of the students of Bataan and Zambales have available internet access at their households. In terms of Wifi connection at home, almost 60% of the learners responded pessimistically. The same response was also noticed in context to pocket Wifi access, where 93% of the student respondents do not have pocket Wifi. Most of the learners are using mobile data to access the internet. At the same time, 48% of the students utilize free mobile data. Moreover, in the same study, among the students at the College of Business and Accountancy, 65% have responded that they have internet access. Nonetheless, only 38% have Wifi connection at home and only six percent have pocket Wifi. Likewise, majority of the students relied on mobile data for internet connection and only45% on free mobile data. In this sense, it is integral to consider that despite the limited access to Wifi connection, a large portion of the students have still internet access at home.

Internet Self-Efficacy. Due to its explosive growth in recent years, the internet has become progressively essential for a variety of human needs. The global internet user population as of 31 March 2017 was 3,731,973,423, accounting for nearly half (49.6 percent) of the global population. The justifiable factors construing this phenomenon are that the internet supplies all need of references such as communication, education, information, and entertainment. It has also been presented as a valuable tool and an abundant source of information for academic works. The Internet is also described as a collection of tools that allow students to communicate with each other and share insights, encounter, and customs. As a result, the use of the internet is critical in maintaining educational practice (Suana et al., 2019).

As cited by Kuo et al. (2020), more and more inventive educational technologies are being enhanced and merged into curriculum design procedures in order to

involve students in an interactive learning platform. This paradigm change in pedagogical technology has provided teachers with a variety of techniques for delivering learning materials and tasks, such as flipping the classroom, hybrid learning, or computer-supported collaborative learning (CSCL). As a result, students must communicate with the content and learning activities via the learning management medium, learn how to utilize third-party interactive media software, and interact with colleagues via cloud communications technology. As a result, when technologies are used in learning, computer literacy and internet self-efficacy have a compelling influence on students' educational performance.

The notion of self-efficacy pertains to efficiency assumptions that present one's willingness towards attitudes required to obtain specific results and identify the effort people will do and how long they will endure when facing struggles or challenging experiences. This concept has been broadly realized in social sciences disciplines, such as learning, program assessment, human resource organization, training, and innovation. Self-efficacy is context-bounded and its significance in foreseeing student learning has been showing. Internet self-efficacy pertains to the belief in one's capacity to manage and perform internet-related tasks necessary to bear given accomplishments (Kuo et al., 2020). In lieu of this, Hodges (2018) stipulated the importance of studying self-efficacy in online learning platforms. With the advance development of the computer technology and the internet, one's confidence in utilizing the internet may function a critical role in online learning. Online learning may give learners with access to multidimensional resources, and the self-efficacy to utilize the internet was presumed to be interconnected to the effectiveness of web-based pedagogy.

In a study conducted by Suana et al. (2019), it was revealed that learners' internet self-efficacy was high and optimistic. This result is consonance with previous research which found that students exhibited a convincing attitude and sufficient self-efficiency of internet use (Baturay et al., 2017). The findings of this study indicated that ICT self-efficacy has functioned a vital role in students' computer skills and information literacy. Although students have exemplified an overwhelming approach towards the internet, technical assistance and training are also required to guide learners' proper usage.

Student Attitudes towards Online Learning. Technological inventions influence the way people learn and think. The dissemination of knowledge which is innate in educational institutions has become more efficient and convention. Combining technology and education provide a way to a pragmatic framework shift that led to the growth in communication and cooperation between educators and students. The product of this integration between innovation and technology is called e-learning, that is internet-based (Reyes et al., 2020). One of the most known types of e-learning is online learning through the Web. Research suggests that to be successful in virtual learning, students must be able to inspire themselves, spend their time shrewdly, take in charge for their self-learning, and engage in the give-and-take of electronic interactions. The students must also take initiative, be resourceful, exhibit perseverance, and believe in their capacity to manage and realize the actions needed to involve in learning. They also need to solve predicaments and assess and monitor their self-learning (Tuntirojanawong, 2013).

By the end of 2019, the COVID-19 pandemic created a multidimensional world impact on almost every sector, including educational system (Osman 2020). Many schools and higher educational institutions were compelled to shun, forcing administrators to devise alternative learning methods while placing the conventional face-to-face learning environment on hold. As a result, educational institutions shifted immediately to distance learning – specifically, the online learning set-up (Reyes et al., 2020).

Khairuddin et al. (2020) defined online learning as a type of distance learning that engage both teachers and learners and requires the use of digital technology and the internet. The rapid evolution of digital communication aids in technology-mediated involvement and simultaneous online learning. It utilizes electronic devices in conjunction with or without an internet connection. This learning model encourages both synchronous and asynchronous learning environments. The method of teaching delivery can be either offline e-learning with digital devices or online e-learning with both technological devices and an internet connection. Online learning provides a learning platform in the absence of place and time restrictions adhering their pace of learning enabling students to manage their own studying schedule. It likewise encourages self-directed learning which can hone students who are self-regulated and independent. In online instruction, learners are responsible of their own learning procedure. The attitudes of students for this kind of educational modality will provide optimistic outcomes to students' school performance and develop communication in the learning platform (Engin, 2017).

Various research implied that online learning and their adoption was broadly influenced by students' attitudes

which were considered as vital aspect in this type of learning modality in developing nations. Attitude refers to what a person feels, thinks, or does about a particular object. This concept is significant to have professional development. Attitudes have three components: cognitive; behavioral; and sensory. Cognitive perspective connects to a student's knowledge of a subject. Sensory, on the other hand, refers to liking/disliking something while behavioral aspect pertains to exhibiting a tendency to respond in relation to behavioral perception (Afroz et al., 2021).

In a study assessing learners' attitude regarding enabling of studying factors through web, findings revealed increasing impact on the students' learning in reference to their predicament solving approach and enhancement of rational thinking abilities. In the same research, assessing and examining affective, cognitive, and behavioral areas among Australian public-school students in reference to their attitudes towards online learning, the result indicates a better response of learning supporting online instruction program. In another research, it was found that students exhibited strong positive inclination regarding the usage of multimedia technologies in virtual pedagogy (Ullah et al., 2017). Nonetheless, some students identified some predicaments in dealing online classes such as back pain, headache, finger point pain, computer vision syndrome (CVS), electricity, and internet access problem. Amidst these challenges, learners have smoothly become familiar with online education (Afroz et al., 2021).

III. METHOD AND MATERIALS

3.1 Research Design

The proponent of this undertaking employed quantitative descriptive survey research in assessing the capability of Cookery students towards blended learning, by determining their internet accessibility profile and readiness towards online demonstration lectures. The quantitative type of research relies on collecting and examining numerical data to describe, explain, predict, and interpret indicators and phenomena. This research focuses on accumulating statistical data and generalizing it to the entire population or deepening phenomena (Creswell, 2013). Moreover, descriptive research systematically describes the characteristics of a population, phenomenon, or event. It responds to the research problems' what, where, and when. It collects quantifiable data for statistical analysis of the population sample. Generally, researchers utilize the descriptive method to unveil the prevailing and underlying conditions for a particular subject matter in which stakeholders or policymakers are involved (McCombes, 2020).

3.2. Participants

The respondents of this study were the Grade 11 TVL-Cookery students at Carmen National High School, currently enrolled in the first semester of S.Y. 2021-2022. Cookery specialization is under the Home Economics strand. The learners under this program are taught fundamental skills in utilizing and maintaining kitchen tools, equipment, and paraphernalia, performing measurement and calculation, food safety handling, different food preparations, and other related competencies (K to 12 Home Economics - Cookery Curriculum Guide May 2016). These students reside primarily in Carmen and Panabo City areas, living under poverty to the moderate-income threshold, with perhaps an average internet connection and a limited learning device. Demonstration lectures are integral to them, given their prime objective is to pass the assessment and receive the certification from TESDA.

IV. RESULTS AND DISCUSSION

1.0 Demographic Profile of Respondents

Based on the findings, the collected data indicate that there are more female enrolled Cookery students than male given that Home Economics programs, like Cookery is popularly known as a women-oriented course. This perception originates from the erroneous comprehension about the responsibilities of each gender in life that was being firmly taught in every home at a young age. Children are taught to behave according to their sexuality. They must speak, act, and decide in a way appropriate to their identity (Pintor et al., 2019). Gender disparity also exists when stereotyped character, actions, and roles are attached to male/females or when pre-judgment occurs urging sexual separation. This culture on gender stereotyping impedes fairness, which results in segregation. In context, Home Economics is still recognized as a female subject while technical courses were intended for men (Pintor et al., 2019).

According to Technical Educational and Skills Development Authority TESDA (2019), the gendering of Technical Vocational career choices is commonly influenced by what trainees and or their parents recognized as gender-appropriate subjects, or training for skills that men and women are expected to perform and are possibly significant when looking for a job. These course choices are also most probably inspired by employment advertisements, job prospects, and hiring preferences of companies (Illo, 2019).

2.0 Internet Accessibility Profile of Grade 11 Cookery Students

The findings revealed that most respondents are using Piso Wi-Fi vendo and mobile data as their primary sources of internet connection at home. Stable internet connection has become a need for majority Filipinos, the Wi-Fi machines also known as Piso Wi-Fi have commenced to spread all over the Philippines. This machine will activate an internet connection that smartphone user can access for Php 5.00 per 30 minutes, or Php 10 for an hour. This mode of internet access has become popular among rural areas because it can provide cheaper and nearby internet connection for those who do not have Wi-Fi at their households or for those who cannot avail to go to computer shops (The Filipino Times, 2018).

Mobile broadband connection or mobile data is commonly accessible among students because most of them have their smartphones. Mobile data enables their phone to get online when they are distant from Wi-Fi. This type of connectivity can disseminate and receive information through a wireless cellular connection (Ottoni, 2019). Overall, the study unveiled that 98% of the student respondents have internet access through Piso Wi-Fi, mobile data, and other forms of internet connection. Through the availability of these different types of household internet connection among the participants, it suggests that Cookery students are initially ready to transition from modular instruction to blended learning.

3.0 Students Readiness towards Online Demonstration Lectures

This finding is consistent with the previous research of Baturay et al., (2017) which found that learners demonstrated an optimistic inclination and sufficient self-efficiency of internet usage. With the advance development of the internet and computer technology, one's confidence in utilizing internet may contribute an essential role in online learning platforms.

The self-efficacy to explore the internet was expected to be relevant to the effectiveness of online teaching (Hodges, 2018). Kuo et al (2019) emphasized that internet self-efficacy substantially foresees student performance. Learners with higher degree of internet self-efficacy have better information searching ability and learn more than those with a lesser level of internet efficiency. Nonetheless, although learners have exemplified a positive attitude towards internet usage, technical assistance and training are still needed to guide students on their blended learning journey (Suana et al., 2019).

V. CONCLUSION

Based on the results, majority of the Cookery students are female, aged from 16-17 years old, whose household monthly income mostly fall below Php 10,957. The types of internet access used at home are commonly Piso Wi-Fi Vendo and mobile broadband connections/ mobile data. Most of the respondents have smartphones while there are only few who have laptop, desktop computer, and netbook and usually they spend one to three hours online. These profiles reflect the moderate internet availability of the students. Nonetheless, they have high internet self-efficacy and high level of attitudes towards utilizing online demonstration lectures as blended learning tool.

The study's findings suggest that the students are ready and capable for blended learning in TVL classes, specifically in utilizing online demonstration lectures. This can be seen in the high level of internet self-efficacy and attitudes of students towards online demonstration lectures. Although, the respondents have moderate internet availability due to economic and internet speed related concerns, still their proficient knowledge and skills of utilizing the internet and readiness for online learning resonate their immense optimism and interest towards blended learning. This positive inclination is contextually existent since their strand as a vocational course requires more practical training and skill-related demonstrations. Reading materials and modules are not sufficient to fulfill the practical knowledge and skills of technical vocational students. They need supplementary demonstrable instructional materials, such as online video lectures that would help them appropriately demonstrate learning competencies.

The moderate internet availability among learners may be addressed by designing a comprehensive yet accessible video demos that are easy to download or view through smartphones. The availability of smartphones among students and their usual online activities are advantageous to maximize supplementary learning through online video lectures. This intervention will help students and teachers make learning more realistic, demonstrable, and effective. The supplementation of video lectures will equip students with the fundamental skills that are lacking in pure modular instruction. The urgency for this learning platform is evident, since the demand for quality education continues to increase. Therefore, despite the prevalence of the pandemic, learning should not be comprised and be dealt mediocrely, instead it should be filled with dynamism and rigor through the help of innovation, technology, and strong support systems.

With this premise, blended learning for TVL strands should be considered and introduced to learners as soon as possible.

VI. RECOMMENDATIONS

In introducing blended learning, Carmen National High School must systematically plan for its implementation. Every sector and stakeholder must be consulted first to discuss fundamental issues and concerns regarding the proposed program. The school must also consult the parents or guardians of the students and conduct a Parents and Teachers Association PTA orientation meeting that would enlighten them about the significance of blended learning and become more aware of their roles and responsibilities with this educational modality. The school must encourage parents/guardians to become more supportive and attentive to the learning needs of their children.

Before to introduce blended learning, the school must conduct pilot testing for the feasibility and effectiveness of utilizing online video lectures. The subject teachers must assess the internet profile, proficiency, and readiness of their students towards online supplementary learning and conduct initial implementation that will evaluate the capabilities and participation of students. If found to be viable, then the school can gradually provide online video lectures to their students. This will be given as a support material to modular learning. Various competencies will be uploaded to google classroom or other platforms that are accessible to learners. In creating video demos, the instructors must consider the heaviness of files, it should be easy to download and view. The lectures' content must also be interactive, dynamic, and profound to learners understanding.

Given the economic and internet speed conditions at Carmen, Davao del Norte and its neighboring areas, the school must provide two options for distant learning, either the students would choose blended modality or remain in pure modular instruction. This alternative will consider the situations of some learners who do not have the sufficient capacity to sustain online learning. This will also enable them to exercise more their right to education.

Meanwhile, in terms of internet self-efficacy, the school must facilitate basic orientation and training in maximizing digital and online platforms for learning. Even though most of the students have high internet self-efficacy, it is still worthwhile to review and refresh their ICT skills and competencies. To further upgrade their technical knowledge, the school may provide higher internet literacy seminar that would enable students and teachers to explore new technologies and software applications for interactive learning. Netiquette or the proper internet demeanors must also be taught in this program that would help learners become more responsible and ethical internet user.

Moreover, to promote higher level of attitudes among students towards utilizing online video lectures, the school, including its faculty must initiate an information campaign drive that would inform and encourage learners about the advantages of this educational modality. They may post it at their Facebook page or any social media platforms that would reach the learners. Furthermore, to mitigate the moderate internet availability among students, the school, in collaboration with LGUs, civic organizations, private groups, and other stakeholders may create a support system program that would help indigent learners to have digital devices and internet access for online blended learning. Through the collaborative efforts of various groups and sectors, the school may find sponsors and donors that would provide impoverished students with the necessary digital devices and internet access. This initiative will make students become more motivated and interested to participate in the new learning modality. It will also entice more out-of-school youths to go back to school and enroll with vocational or academic courses. This intervention would likely to succeed if the school and its partners have the utmost willingness to help the students.

This study acknowledges its limitations of conducting a study to a small population of Cookery students. Therefore, for future researchers, large surveys should be ventured to further understand the internet accessibility and readiness of students towards online video lectures. They may include other students from other Vocational courses as study's respondents. For a better comprehension of the subject at hand, future researchers should include correlational inquiry in their studies to further test the significant relations between and among the given variables. It is likewise recommended that they should also survey the readiness of schools and teachers in terms of their technical capabilities, internet access, and availability of digital devices towards blended learning. These recommendations will give them a more extensive, reliable, and comprehensive quantitative understanding of the subject at hand.

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