

Remote Learning Constructs Toward Blended Learning Modality Among HEI Teachers and Students Amid Covid19 Pandemic

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ABSTRACT

Across the globe, the impact of Covid19 pandemic on the education sector is unprecedented. Most Higher Education Institutions (HEIs) utterly changed the mode of delivery of their curricular programs. Before the pandemic, blended learning is considered a supplemental mode of delivery, while remote learning is an alternative or optional mode of study. However, remote learning has become a dominant option for teachers and students to embrace during these trying times. This empirical research aims to determine the respondents' constructs toward remote learning. In this context, the construct is anchored on the 'personal construct theory,' which suggests that a person develops a construct based on understanding, observation, and experience. An online survey was conducted to test the hypothesis that the level of teaching methods, IT skills, and IT tools variables differ between teachers and students. The quantitative approach, descriptive research design, and snowball sampling technique were employed to address the research questions. Responses were analyzed using t-test and Spearman. The result showed the more desirable the remote learning methods are, the higher the willingness constructs. IT skills and resources can influence the respondents' likelihood and willing constructs to engage, and positive construct defines the willingness to engage. On this basis, the respondents' collective positive construct can be translated to their self-readiness and preparedness for remote learning.

Keywords Remote learning; Constructs; Blended learning; Higher Education Institutions; Covid19 Pandemic

Introduction

The Covid19 pandemic has forced the education sector to a complete halt. Some institutions tried to resume later with a different strategy just to prevent classes from further disruptions. Stakeholders wonder how the education sector would recover from the downturn since nobody is in the right position to predict the future beyond the Covid19 pandemic. The present dilemma gave rise to blended learning (BL) to become a new normal. While various studies have been published on blended learning in the past, this present one is considered more focused on the remote learning component and timely as it is done at the height of the pandemic.

There is a question of whether the students and teachers under study are prepared to engage in remote learning when classes shift from traditional to blended learning. This modality was adapted out of desperation to keep everyone safe by following social distancing protocol. Specifically, remote learning has its challenges, including IT resources and IT skills, which are the two requisites for remote learning engagement. While some had succeeded, others struggled in implementing their academic programmes remotely due to unprioritized relationship-building. For instance, students' progress must be monitored appropriately, and as agents of their education, they must be substantially motivated (Firth, 2018). The author also stated that remote learning is bound to fail if expectations and clear program goals are not set. These underlying reasons were

the basis for establishing the parameters of the independent variables of this study.

This study identified three variables such as IT resources, IT skills, and remote learning methods, to measure the respondent's construct. Their importance to blended learning is explained by Launer (2010) as a combination of self or remote settings supported by technology and face-to-face. The call for blended learning as a mode of instruction emanates from the common concern of keeping the teachers and students safe from the pandemic by limiting physical contact. On the one hand, a remote learning setting supports social distancing. On the other hand, it poses some challenges like readiness in terms of IT skills and availability of IT resources for its implementation (Draffan and Rainger, 2006).

Face-to-face learning demands teaching space (O'Connor et al., 2011), critical in maintaining physical and social distancing. Hence, higher institutions are challenged to develop strategies to mitigate the adverse impacts of this unprecedented pandemic. Thus, the role of blended learning is crucial in this time of the pandemic. Teachers and students are bracing for the shift to blended learning. Until then, no one can tell what lies ahead with this new system. Experts say that the new normal will be around for some time.

Research Aim

This investigation explores the various methods, IT skills, and IT resources that can influence or form the teachers' and students' constructs towards remote learning.

Specifically, it aims to answer the following questions:

What are the teachers' and students' constructs toward remote learning based on IT resources, IT skills and methods; and

What is the level of willingness construct of teachers and students to engage in remote learning?

Significance of the Study

A grip of the students' and teachers' attitudes toward remote learning, in particular, could provide an overview of the current state of blended learning programs across higher education institutions around the world. Their attitude could be used to address issues related to poor IT skills, lack of readiness to engage, and availability of IT tools, especially in these trying times of pandemic. Any study like this present one could help spread awareness and facilitate exchanging of information between respondents. Knowledge transfer and experience could contribute to the research skills of the teachers collaborating in this study. In effect, the research capacity of institutions will also increase.

Literature Review

Blended Learning

Operationally defining blended learning is essential to put this study forward. The blended learning concept's novelty integrates traditional classroom teaching, and ICT assisted learning online or offline (Lalima & Dangwal, 2017). It is a personalized e-Learning experience by combining in-person (face-to-face) and technology-based e-remote learning (Lawless, 2019). It widens the learning experience by learning anytime, anywhere, and reshaping the teacher's usual role. Maxwell (2016) notes that blended learning is hard to define in the absence of a universal definition due to the lack of a common language to describe the phenomenon. The author offers a three-part purpose of blended learning – First, it is a formal learning program in which students learn in part online and takes control of time, place, path, and pace. Second, the students learn in part away from home and are supervised by the teacher. Third, all methods are combined to create an integrated learning experience. According to Zook (2018), blended learning represents an educational strategy incorporating traditional and digital learning methods. Blended learning entails a range of teaching strategies wherein face-to-face instruction and individual, student-directed, and computer-based educational programs are combined (Eastman, 2015). The

above definitions provided the underlying variables of this present study on the remote learning component of blended learning, namely: IT resources, IT skills, and methods.

Remote Learning Component of Blended Learning Modality

Blended learning is not just an offshoot of technological innovation and, indeed, not something new. Some articles can support this argument. Students might have been using blended learning somehow for years (Teach Thought Staff, 2019). Blended learning comes in diverse types and methods. It is not all about online (Rosell, 2020) because today's technological learning innovations are based on what occurs inside the classroom. Smartphones, desktop computers, tablets, and laptops are only a few technologies that prevail in our daily midst. So it is just typical to see these digital tools around the classroom. Many schools, colleges, and universities begin to incorporate new technologies into their curricular structures to enhance the traditional classroom and to offer a more valuable learning experience. The author introduces blended learning methods, including a flipped classroom model, switching to digital assessment to allow instant feedback, digital revision, multimedia tools for group projects, and virtual office hours. Blended learning is an incredible experience that benefits students, both traditional and virtual learning. Oweis (2018) studied the effects of using blended learning methods on student's achievement and motivation. Results showed that students had learned better when blended learning was employed, and technological tools were integrated into the traditional learning method. The study concluded that anything new always excites the students, which increases their motivation to try a unique learning experience. Giarla (2020) mentions that blended learning models come in various shapes, sizes, and personalization to fit individual needs. Those models include online, flex, personalized blend, rotation, face-to-face, online lab, and self-blend. Blended learning allows an individualized learning experience. Paterson (2016) identifies four essential spectrums of blended learning methods: blended learning schedules, the teacher leading the program, the participants, and technology. Across these spectrums, different teaching methods can be integrated, like online classes and webinars. Remote learning is labeled or termed in many ways (Paterson, 2016, Oweis, 2018; Giarla, 2020), but they all mean the same thing.

IT Skills & Resources for Remote Learning

This present study supports the argument that learners' level of IT skill influences their choice of a gadget. Both IT skills and resources are essential components of remote learning. Graham et al. (2019) identify four necessary IT skills as the ability to integrate online with in-person instruction (Online Integration), the ability to operate digital tools to guide students and monitor their growth (Data Practice), the ability to direct learning that allows customization of target outcomes, pacing and paths (Personalization) and the ability

to facilitate virtual interaction between participants (Online Interaction). Similarly, Continu (2018) mentioned the tools considered in this present study as IT resources like the Internet and telecommunication network, which are essential for webinars, blogs, and social media, among other platforms.

Theory of Constructs

Constructs are described in this study as the willingness of the respondents to engage in remote learning. Chiari (2017) defines personal constructs based on Kelly's Theory on Personal Construct, which suggests that individuals interpret their knowledge of the world and themselves. Hence, the participants' willing construct toward remote learning can be associated with their experience of the variables identified in this study.

Methodology

Conceptual Framework

This study zeroed in on causes as independent variables and effect as the dependent variable. The remote learning methods, IT skills, and IT resources are considered independent variables, while the construct is the dependent variable or the effect. This research is based on Aristotle's Theory of Causality, which states that "A firm grasp of what a cause is, and how many kinds of causes there are, is essential for a successful investigation of the world around us." (Stanford Encyclopedia of Philosophy, 2019). For instance, the higher education teachers and students' constructs to engage in blended learning is influenced by various factors illustrated as independent variables in the diagram below:

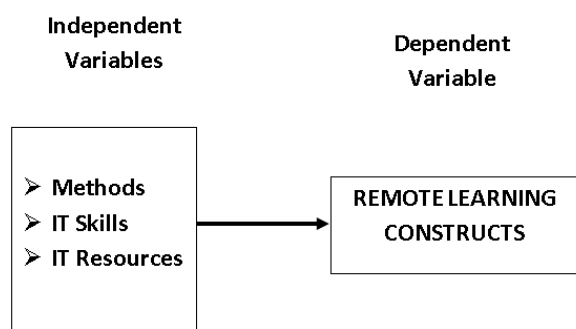


Figure 1. Paradigm showing the relationships among the variables in this study

Research Design

This study utilized the descriptive research design to elicit information regarding higher education teachers' and students' constructs toward remote learning. Descriptive design can be a useful tool to gather individual responses (McCombes, 2019) related to the respondents' constructs

based on the given variables. The descriptive research design also allows the quantitative approach to collect primary data through a survey. The questionnaire was a semi-structured instrument used to collect a large volume of data to address the research problem and achieve its aim and objectives.

Sampling

This study employed a referral, also called a snowball sampling technique. The sample size was determined based on the respondents' availability and interest to participate. The global survey was administered online for fifteen days and generated over four hundred global participants of different nationalities. By the end of the survey period, the total number had reached 420. However, the twenty participants who joined the instrument trial were excluded, bringing down the sample to precisely four hundred only.

Table 1. Nationality

Nationality	Frequency
American (6), Pakistani (6), Chinese (6)	18
Bahraini (3), Colombian (3), Japanese (3)	9
British (1), Bulgarian (1), Canadian (1), Egyptian (1), French (1), Indonesian(1), Jordanian (1), Kenyan (1), Nigerian (1), Slovenian (1), South African (1), Tunisian (1), Ukraine (1), Vietnamese (1)	14
Filipino	267
Indian	15
Korean (2), Sri Lankan (2)	4
Malaysian	4
Omani	69
Total	400

Data Collection & Analysis

The survey instrument was designed using google forms. The Weblink of the survey was sent to the respondents. Teachers and students participated in the study at their own time for a 2-week duration. The referral technique of sampling ensured that only college teachers and students could gain access to the survey link. The responses were stored in a password-protected account in google drive, where only the researchers can access them. Data collection was terminated after the specified duration, and the collected data were discarded appropriately after the statistical treatment.

The questionnaire consisted of a consent page detailing all information related to the study. The respondents were asked to indicate their agreement to participate in the survey. The survey questionnaire had the following parts: Part 1 elicits the profile of respondents; Part 2 determines the various blended methods used in learning; Part 3 specifies the students and teachers level of IT skills; Part 4

identifies students and teachers IT resources and Part 5, determines the respondents' level of willingness to engage in blended learning. Parts 2 to 5 of the questionnaire elicit interval data using the five-point scale.

The questionnaire as the main instrument was subjected to a face validity test by two experts. Twenty participants were involved in the questionnaire pilot test, and their feedbacks were considered for improvement purposes. A construct reliability test was employed using Cronbach's Alpha for the variables, consisting of IT resources, IT skills, and remote learning methods gained results of 0.922, 0.894, and 0.869, respectively.

The data were analysed through SPSS to determine the descriptive and inferential statistics. Mean rating, independent t-test, and Spearman correlation were also utilized to obtain the results presented in charts and tables.

Results & Analysis of Findings

Demographics

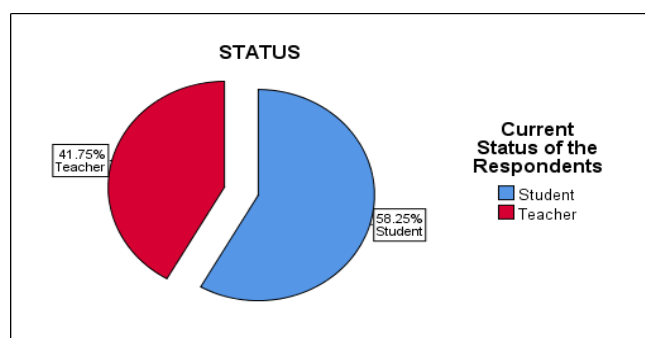


Figure 2. Status

A total of 400 respondents voluntarily joined in the online survey, of which 41.75% were teachers, and the majority of 58.25% were students.

Preference of Class Frequency

Class frequency and duration were incorporated in the survey to validate the relevance and importance of teaching periods, either remote or face-to-face. Research shows that the ideal remote online session length is somewhere 'between 15 and 30 minutes (Winstead, 2020,p.1). The author claims that this view on class duration was based on psychological research and specific content patterns. Therefore online sessions of a remote learning should not exceed 1.5 hours, and the shorter, the better. The author also noted that student engagement fades dramatically right after the first 6 or 7 minutes in an online session. This study links the preference of class frequency with IT skills and IT resources.

Table 2. Preferred Class Frequency in Blended Learning Method among Teachers

Frequency of Classes	No. of Occurrences	Percentage
25% Face-to-Face; 75% Remote- Online	67	40.12 %
50% Face-to-Face; 50% Remote - Online	61	36.53 %
75% Face-to-Face; 25% Remote - Online	26	15.57 %
Others	13	7.78 %
Total	167	100.00 %

Table 2 shows the preferred frequency of classes in blended learning methods by the teachers. It is shown that 40.12% prefer a combination of 25% Face-to-face classes and 75% remote online classes. It can also be shown that only a few percent (15.57%) prefer a class with a higher face-to-face component.

Table 3. Preferred Class Frequency in Blended Learning Method among Students

Frequency of Classes	No. of Occurrences	Percentage
25% Face-to-Face; 75% Remote - Online	67	28.76%
50% Face-to-Face; 50% Remote - Online	53	22.75 %
75% Face-to-Face; 25% Remote - Online	100	42.92 %
Others	13	7.78 %
Total	233	100.00 %

Table 3 shows the preferred class frequency in blended learning methods by the students. The students (42.92 %) preferred a blended learning set-up, where there is a more prominent face-to-face component than the remote online component.

Online Class Duration

Table 4. Preferred Duration of Remote Online Class among Teachers

Remote - Online Class Duration	Frequency	Percentage
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Maximum of 30 minutes	39	23.35 %
Between 30 minutes and 1 hour	42	25.15 %
Maximum of 1 hour	71	42.52 %
More than 1 hour	15	8.98 %
Total	167	100.00 %

Table 4 shows the preferred online class duration by the teachers. Results show that seventy-one (71) or 42.52 % of teachers preferred a maximum of one hour for remote online learning. Only (8) or 8.98% of teachers preferred a remote online class session that exceeds an hour.

Table 5. Preferred Duration of Remote Online Class among Students

Remote Online Class Duration	Frequency	Percentage
Maximum of 30 minutes	39	16.74 %
Between 30 minutes and 1 hour	67	28.76 %
Maximum of 1 hour	97	41.63 %
More than 1 hour	30	12.88 %
Total	233	100.00 %

Table 5 shows the preferred online class duration by students. Most (41.63%) of the students preferred a maximum of one hour, and only a few (30) or 12.88% chose a class duration of more than an hour.

Table 6. Summary of Overall Results

The participants were asked to answer the questions related to individually categorized variables. Their composite answers were linked to their willing constructs to engage in remote learning. The neutral indicator was added to provide them an option to decline due to a lack of awareness, experience, or exposure.

The components of the variables under study were identified from 100 blended learning resources for teachers (teachthought, 2020) for IT Tools & Skills; Remote online learning: Misconceptions, benefits, and challenges (Fadde and Vu, 2014) and Blended Learning Strategies, Challenges and Methods (Kaur, 2013).

Variables	Teachers	Students
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	Mean Rating	Interpretation	Mean Rating	Interpretation
Remote Learning Methods	3.92	Desirable	3.63	Desirable
IT Skills Level	3.63	Very Good	3.73	Very Good
IT Resources Level of Importance	4.45	Very Important	4.11	Moderately Important
Willingness Construct	4.05	Somewhat Willing to Engage	3.48	Somewhat Willing to Engage

Table 6 reveals a summary of the overall results representing the three variables that constitute the baseline data to determine the teachers' and students' constructs towards remote learning. Both groups indicated the same level of willing constructs to engage in remote learning.

Remote Learning Methods

A total of 14 conventional methods (Allan, 2007; Continu, 2018) of learning in a remote setting were identified. These methods consist of videos, webinars/seminars, discussion forum, individual mixed class activities (remote and traditional), pair/group mixed class activities (remote and traditional), individual mixed assessments (remote and traditional), pair/group mixed assessments (remote and traditional), online academic advising, face to face academic advising, online research activities, library research activities, video conferencing, online feedback and face to face feedback. The respondents were asked to indicate their response to each method as desirable, desirable, neutral, moderately undesirable, and undesirable. Based on the results, both students and teachers found remote learning methods to be desirable. Teachers have a mean rating of 3.92, while students have a mean rating of 3.63. Of the 14 methods, videos emerged as the most desirable method among teachers and students.

Level of IT Skills

The respondents were asked to rate their skills on the fourteen (Velarde, 2020) essential digital tools. Their overall responses were based on their experience with those tools. Generally, both teachers and students rated themselves "Very Good" with a mean rating of 3.63 and 3.73. It can be noted that students rated themselves higher than the teachers. Out of the fourteen digital tools, both teachers and students exhibited a very good rating in Moodle, Blackboard, CRS and other Learning Management System

(LMS), Grammarly, MS office application, email system, discussion boards and forum, live Internet streaming, web/video conferencing application, mobile device application, social media, screen capture/recording, multimedia software, and YouTube. Similarly, both groups rated themselves 'good' on cloud computing and blogs.

Level of Importance of IT Resources

This study identified twenty (executech, 2020) essential IT resources, and the respondents were asked to rate them according to their level of importance in the conduct of remote learning. Results show that out of 20 IT resources, teachers rated 15 as very important, while students perceived only 12 as very important. Teachers have a higher mean rating of 4.45 than the students' 4.11. The IT

resources rated by both teachers and students as very important are laptop/notebook, smartphone, WIFI, wired internet connection set, WIFI router, Internet, MS Office, Internet Explorer/search engine, video conferencing, computer software/programs, Internet speed, and economic capability. Teachers rated desktop computer sets, video cameras, and multimedia functions as very important, while

students rated them as moderately important only.

Willingness to Engage in Remote Learning among Respondents

Both teachers and the students have willing constructs to engage in remote learning. Teachers posted a higher mean rating for willingness construct compared with students.

Table 7. Summary of Significant Difference Between Variables and Respondents

Variables	Teachers				Students			
	Mean Rating	Std. Dev.	T-value	P-value	Mean Rating	Std. Dev.	T-value	P-value
IT Skills Level	3.63	0.765	1.34	0.182	3.73	0.774	1.34	0.182
IT Resources	4.45	0.431	-6.36	<0.001	4.11	0.636	-6.36	<0.001
Willingness Constructs	4.05	0.862	-6.02	<0.001	3.48	1.030	-6.02	<0.001

Hypothesis One: There is no significant difference in the level of IT skill between teachers and students.

An independent t-test was employed to determine the significant difference in IT skills between teachers and students. Based on their mean rating, students have a higher skill level compared to teachers. The independent t-test shows a t-value of 1.34 and a p-value of 0.182. This means that there is no significant difference in the IT skill level between respondents. The rating difference is not statistically significant to conclude that students are more skillful in IT than teachers. Therefore, the null hypothesis is accepted. This result affirms the present study's findings concerning a high willingness construct to engage due to the participants' IT skills, a primary requirement for blended learning engagement. This result conforms (Tsoni and Pange, 2014) that successful blended learning requires essential IT skills such as prior knowledge and ICT literacy.

Hypothesis Two: There is no significant difference in the importance of IT resources between teachers and students.

An independent t-test was conducted to determine the significant difference in the importance of the common IT resources between teachers and students. Teachers have a higher mean rating (Table 7) than the students. The result of the independent t-test shows a t-value of -6.36 and a p-value

of less than 0.001. This result implies that teachers place higher importance on IT resources than students. This is somehow due to factors like teachers' economic reliance and better access to IT resources. Therefore, the null hypothesis is rejected.

Hypothesis Three: There is no significant difference in the willingness to participate in remote learning between teachers and students.

The independent t-test determined the significant difference in the willingness to participate in remote learning between teachers and students. The t-value of -6.02 and a p-value of less than 0.001 indicates a significant difference in the willingness construct to participate between the two groups. It can be deduced that teachers have more willing constructs to engage in remote learning than students. Therefore, the null hypothesis is rejected.

Hypothesis four: There is no significant relationship between methods, IT skills, IT resources, and willingness construct to participate in remote learning.

Table 8. Results of Spearman Correlation of Willingness Construct to Participate

Variable	Correlation	P-Value
The desirability of Remote Learning Methods	0.346	<0.001
Level of IT Skill	0.212	<0.001
IT Resources Level of Importance	0.188	<0.001

Table 8 shows the result of the Spearman correlation. The first variable considered is the perception of the respondents to the desirability of various remote learning methods. A correlation coefficient of 0.346 was computed at a p-value of less than 0.001. This shows a significant relationship between the participants' willingness to engage in remote learning and their perception of the different remote learning methods. There is a low positive correlation between the two variables. It can be concluded that the more desirable the remote learning methods are to an individual, the more willing is the individual's construct to engage in remote learning.

The next variable correlated was the level of IT skills of the participants. The Spearman correlation shows a coefficient of 0.212 at a p-value of less than 0.001. This means that there is a significant relationship between the two variables. However, the correlation strength is negligible since it is less than 0.3. The same conclusion can be made based on the correlation between the participants' willingness constructs and their perception of the importance of IT resources. The Spearman correlation is 0.188 at a p-value of less than 0.001. Despite the significance of the p-value, the correlation coefficient is too small to be considered.

Discussion of Findings

The use of videos as the most desirable and face-to-face feedback as the least desirable method of blended learning for teachers and students implies the popularity and commonality of both groups' methods. On the contrary, students' face-to-face feedback as students' least desirable method reflects their most preferred frequency of classes: 75% Face-to-Face; 25% Online. Overall, the desirability result of blended learning methods is acceptable. Oweis (2018) claims that students have learned better when blended learning was employed on students' achievement and motivation due to incorporating technological tools into the traditional learning method. For video as the most desired method, both respondents could benefit from training or workshop on video making. As an option to face-to-face, feedback, chatrooms, forums, and social media are possible alternatives.

The preferred frequency of classes in the blended learning setting among teachers is an absolute contrast among students. Teachers' least preferred method is face to face (traditional), and their most preferred is remote learning, while students most preferred is face to face, and the least preferred is remote learning. This study elucidates teachers'

readiness and preparedness to shift from traditional to blended learning methods. In a conventional setting, Racheva (2019) explains that the asynchronous system is useful for following up on their studies, take-home assignments, individual work, and assessment. The synchronous virtual classroom permits catching up, flexibility in working/office hours, classroom connectivity, online lectures, and added support for above-average students. Teachers must provide support to enhance students' skills and confidence to engage with them in remote learning. Also, this study recommends a gradual transition to remote methods of learning.

The result of the class duration yielded a collective agreement between teachers and students. All respondents indicated that both face-to-face and remote classes should not exceed one hour. In other words, regardless of the method, the instruction should not exceed an hour. While institutions strictly adhere to their official timing, teachers and students must be involved in the decision-making process.

Teachers rated themselves very good on the use of email systems as their highest level of IT skills. Students recorded a very good level of IT skills on the use of YouTube for academic purposes. The popularity of video is once again affirmed as the most preferred instructional medium for blended learning. This is so because of YouTube's availability, accessibility, and convenience. Email is popular among teachers because of its flexibility of usage for communication and documentation. Integrating YouTube with teaching and learning is necessary.

Both teachers and students considered the Internet the most important of all IT resources for blended learning. Likewise, games are regarded as the least important of all IT resources for both groups. So, any IT device would be meaningless and irrelevant without the Internet. Lack of IT infrastructures such as connectivity, hardware, and software is an extreme barrier to remote learning's success (Sayed & Baker, 2014). Allocating the Internet budget is a must, and institutions must improve their network infrastructure for a faster and reliable Internet connection. Budget support for Internet connection is badly required.

Teachers and students somewhat believe that employing IT tools and resources can improve communication, influencing their construct towards remote learning. Both groups think that remote learning as the mode of delivery can improve students' achievement.

Both teachers and students are willing to engage in remote learning. This is reflected in the degree of desirability of the remote learning methods, level of IT skills, and IT resources' importance, as stated by both respondents. The success of remote learning depends on proper implementation to eliminate its possible barriers (Movchan, 2018), consisting of the high cost of maintenance, increased dependence on technology, and wastage of offered or existing resources. Support for IT and other educational resources are essential.

There is no significant difference in terms of the respondents' level of IT skills. However, teachers exhibited higher levels of IT skills than students. Compared with students, teachers showed a higher inclination towards IT resources for remote learning. This can be attributed to their access to IT resources and their economic self-reliance. Again, support for IT resources and IT skill enhancement training is essential to students and teachers to guarantee any remote learning program's success.

Conclusion and Recommendation

Based on the findings, the remote learning constructs of teachers and students are formed by the three independent variables such as remote learning methods, IT skills, and IT resources. Across groups, those variables have a relationship to the willingness constructs of the respondents to engage in remote learning. Individually, a positive construct towards remote learning means a high level of willingness to engage. The level of IT skills and IT resources influence the likelihood and the willingness of the respondents to engage. Overall, both teachers and students have a collective positive construct toward remote learning. This construct could translate to self-readiness and preparedness to participate in remote learning amid the pandemic. Under the IT skill variable, it can be deduced that using a new technology is an intimidating experience to the respondents which necessitates support for training and exposure. Moreover, IT resources like the Internet and gadgets are determinants of remote learning success. Therefore, higher priority must be set toward connectivity upgrade, technological resources, and other infrastructure development. Participation in this study has added to individual awareness of the current state of teachers, students, and higher education institutions (HEI) engaging in remote learning. So, further purposeful studies to include other variables that are not covered in this study should be advanced to add to the collective knowledge of remote learning.

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