

GSJ: Volume 11, Issue 6, June 2023, Online: ISSN 2320-9186

www.globalscientificjournal.com

**BLENDED LEARNING AND ACADEMIC ENGAGEMENT IN ICT AMONG THE
STUDENTS IN KOLEHIYO NG PANTUKAN**



A Thesis

Presented to the faculty of the Education Program
Kolehiyo Ng Pantukan, Pantukan
Davao de Oro

In Partial Fulfillment of the Requirements for the Degree
Bachelor of Technology and livelihood Education major in
Home Economics

JOAN C. NIONES

REYNILDA G. ALAMIS

SANNY DARAMAN, LPT

DR. LYNARD BOBBY L. ASIRIT

CHARISSE MAE L. MAPANTOC

CHARMAINE JANE L. MAPANTOC

March 2023

APPROVAL SHEET

The thesis entitled, "**BLENDED LEARNING AND ACADEMIC ENGAGEMENT IN ICT AMONG THE STUDENTS IN KOLEHIYO NG PANTUKAN**" prepared by **REYNILDA G. ALAMIS, CHARISSE MAE L. MAPANTOC, CHARMAINE JANE L. MAPANTOC** in partial fulfillment of the requirements for the degree, Bachelor of Technology and Livelihood Education major in Home Economics has been examined and is hereby approved and accepted.

MR. SANNY DARAMAN, MAHEED
Adviser

Panel of Examiners

APPROVED by the Panel of Examiners with a grade of _____

DR. LYNARD BOBBY L. ASIRIT, LPT, PDSM, CESE
Chairperson, Advisory Committee

DR. CELEDONIA C. COQUILLA, LPT
Member, Advisory Committee

DR. EUFROSINA P. MINES, CHE
Member, Advisory Committee

ACCEPTED in partial fulfillment of the requirements for the degree, Bachelor of Technology and Livelihood Education major in Home Economics

FDR DR. JOCELYN H. HUA, DFRIEDR
College President

ACKNOWLEDGEMENT

First of all, we thank God, the Almighty, for His guidance and strength He gave to us throughout our research study and made this research successful.

We would like to give special thanks to Dr. Lynard Bobby L. Asirit CESE for helping, motivating and guiding us throughout this research, and for his patience and effort he gave to make this research study possible.

For Dr. Jocelyn H. Hua, DFRIEDr. Her dynamism, expertise, sincerity and motivation have deeply inspired us and moulded us into what we are now. For Sir Sanny Daraman MAHEED, as our research adviser who shared his knowledge in research and never failed to check our research output. We would also like to thank our former adviser, Sir Ezzedin M. Manidoc for helping us and teaching us particularly on solving the corrections in our study. For Sir Mharfe M. Micaroz MAEd, as our program head of Bachelor of Technology and Livelihood Education major in Home Economics who supported us in all possible ways.

Finally, our thanks go to all the people who have supported us to complete the research study and who are always there for us throughout this journey.

The Researchers

Reynilda G. Alamis

Charisse Mae L. Mapantoc

Charmaine Jane L. Mapantoc

TABLE OF CONTENTS		Page
TITLE PAGE		
APPROVAL SHEET		i
ACKNOWLEDEMENT		ii
TABLE OF CONTENTS		iii
LIST OF TABLES		v
LIST OF FIGURES		vi
ABSTRACT		vii
CHAPTER		
1	THE PROBLEM AND ITS SETTINGS	
	Background of the Study	1
	Statement of the Problem	2
	Hypothesis	3
	Review of Related Literature	4
	Theoretical and Conceptual Framework	20
	Significance of the Study	23
	Definition of Terms	23
2	METHOD	
	Research Design	27
	Research Subject	28
	Research Instrument	30
	Data Gathering Procedure	33

	Statistical Treatment of Data	33
3	RESULT AND DISCUSSION	36
4	SUMMARY, CONCLUSION AND RECOMMENDATION	
	Summary of Findings	63
	Conclusion	64
	Recommendations	64
	REFERENCE	65
	APPENDICES	
	A. Letter of Intent	70
	B. Letter to Conduct the Study	71
	C. Validation Sheet	72
	D. Research Instrument	76
	CURRICULUM VITAE	86

LIST OF TABLES

Tables	Page
1. Distribution of Respondents	29
2. Survey Questionnaire Score Range	31
3. Level of Blended Learning in terms of Social Presence	38
4. Level of Blended Learning in terms of Cognitive Presence	41
5. Level of Blended Learning in terms of Teaching Presence	44
6. Summary on the Blended Learning	47
7. Level of Academic Engagement of KNP students in ICT in terms of Intellectual Engagement	50
8. Level of Academic Engagement of KNP students in ICT in terms of Social Engagement	53
9. Level of Academic Engagement of KNP students in ICT in terms of Behavioral Engagement	56
10. Summary of the Level of Academic Engagement of KNP students in ICT	59
11. Relationship Between the Level of Blended Learning and Level of Academic Engagement of KNP students in ICT	62

LIST OF FIGURES

Figures	Page
1. Conceptual framework of the study	22

Abstract

This study focuses on the level of blended learning and the academic engagement of KNP students in Information and Communication Technology or ICT. The purpose of this study is to determine whether student academic engagement in Information and Communication Technology (ICT) is visible under blended learning. The researchers also conduct this study in order to identify the level of blended learning and KNP students' academic engagement in ICT. It is aimed at determining the significance of blended learning as independent and academic engagement as dependent variables. The researchers will utilize the quantitative research method for this research study. The respondents of this study were composed of randomly selected students, which means 350 of the total population of KNP Education students. An adopted research instrument was used in this study. The adopted survey questionnaires measured the respondent's level of blended learning and academic engagement in ICT. In this research, KNP students will be the respondents, and Simple random sampling will be used in this study. The results revealed the level of blended learning among students in Kolehiyo ng Pantukan is often which implies a high level of blended learning. On the other hand, the level of academic engagement in ICT among the students in Kolehiyo ng Pantukan is often which implies a high level of academic engagement. In summary, there is a significant relationship between Blended Learning and Academic Engagement in ICT among the students in Kolehiyo ng Pantukan. In summary, all factors are statistically significant factors in students' academic engagement in ICT for the particular reason that the p-value is less than .05 for social engagement, intellectual engagement, and behavioral engagement.

Keywords: Research topic, population, method, application of results or findings

CHAPTER I

INTRODUCTION

Background of the Study

Student academic engagement in ICT is assumed in the face of an expanded educational experience facilitated by Information and Communication Technologies (ICT). The National University of Rio Cuarto students display various actions when learning. Some of these actions are developed at the social level, meaning they are collaborative and build support networks. In contrast, others suggest acting more freely and assuming responsibility for their learning. In addition, as Butler et al. (2015) stated, there is great concern about how poor student involvement in Information and Communication Technologies (ICT) courses may affect learning outcomes, retention, and the student experience. (Rigo, D.Y., & Rovere, R., 2021).

One of the challenges educators faced is finding ways to engage students in academics. Gina G. Bendejo et al. (2019) stated that in the Philippines, student engagement in any school-related activity is at its lowest level. Due to poor school circumstances and low parental involvement, many pupils quit school early because they are disinterested in attending class. Students will feel a sense of belonging at a school that offers a safe and suitable learning environment that encourages learning and student involvement. Developing a pleasant school environment demonstrates good quality and character of academic life, which positively increases student participation in the classroom because of the comfort.

In addition, according to Enerio (2021), student engagement is the most significant factor in the learning process. Since the students develop a stronger feeling of accountability for their activities, students are more empowered to achieve their goals, and for students to succeed academically, their engagement is essential. However, in Mindanao State College of Science and Technology (NMSCST), the graduation and board exam passing rates are below the average national rates, possibly due to low student engagement levels.

This study focuses on the level of blended learning and the academic engagement of KNP students in Information and Communication Technology or ICT. This study aims to determine whether student intellectual engagement in Information and Communication Technology (ICT) is visible under blended learning. The researchers also conducted this study to identify the level of blended learning and KNP students' academic engagement in ICT.

Statement of the Problem

This study aims to determine whether student academic engagement in Information and Communication Technology (ICT) is visible under blended learning.

This study aims to gather empirical evidence on the relationship between blended learning and academic engagement. Specifically, this research sought to answer the following questions:

1. What is the level of blended learning in terms of,
 - 1.1 Social presence;
 - 1.2 Cognitive presence; and
 - 1.3 Teaching presence?

2. What is the level of academic engagement of the respondents in ICT in terms of,
 - 1.1 Intellectual Engagement;
 - 1.2 Social Engagement; and
 - 1.3 Behavioral Engagement?

3. Is there a significant relationship between the level of blended learning and academic engagement perceived by the respondents?

Hypothesis

The following was tested at 0.05 level of significance.

HO₁ There is no significant relationship between Blended Learning and Academic Engagement in ICT among the students in Kolehiyo ng Pantukan.

Review of Related Literature

This chapter presents the related literature about the blended learning and student's academic engagement in ICT through the indicators of each variable. This includes the social presence, cognitive presence, and teaching presence for the independent variable. Social engagement, intellectual engagement, and behavioral engagement for the dependent variable.

Blended Learning

Using a computer, the internet, or a "smart classroom," blended learning combines traditional classroom instruction with e-learning. The teacher and student engage in person, and the course promotes student-teacher interaction. (Kavitha & Jaisingh, 2018). It evolved naturally from electrical and programmed learning. To increase student motivation and improve their academic performance, the researchers found that blended learning is a cutting-edge method that combines traditional learning with e-learning in all its models.

According to Hrastinski (2019), "blended learning" is often used. Different definitions, models, and conceptualizations of blended learning are examined, along with their implications. Due to its broad definitions, methods, and conceptualizations, the literature refers to almost all educational formats that combine in-person and online learning as blended learning. The term blended learning has become more popular.

The phrase "blended learning" is occasionally used to denote different blends, such as mixing multiple instructional methods, pedagogical approaches,

and technological platforms, even though these blends do not follow standard definitions of blended learning. Blended learning can mean many different things. Therefore, it must be precisely defined for them by researchers and professionals. It is also suggested that alternative, more emotive words be utilized in addition to or instead of blended learning.

In addition, Thornbury (2016) stated that blended course's technology components can be chosen using 12 guidelines. Input, output, noticing, scaffolding, feedback, engagement, fluency, chunks and formulaic language, personalization, and flow should all be possible. Whatever method of instruction is chosen, it must be adaptable enough to deal with problems like language complexity, which includes the interconnectedness of its numerous subsystems including grammar, lexis, phonology, discourse, and pragmatics.

Moreover, according to the New Media Consortium Horizon Report, blended learning designs are one of the immediate drivers influencing technology adoption in higher education during the next one to two years. According to the 2017 annual survey of higher education conducted by the EDUCAUSE Learning Initiative, blended learning is one of the main problems in teaching and learning. (EDUCAUSE 2017).

Researchers are becoming more interested in analyzing the effects on teachers and students as institutions start to consider blended learning in education. How has blended learning affected the teaching and learning environment? This is the investigation that gave rise to the group of practitioners

for this technique. The complexity of how blended learning interacts with the cognitive, emotive, and behavioral aspects of youth behavior is being studied by academics as they consider how it could alter the academy. (Adams Becker et al., 2017).

It is well-established that blended learning enhances learning. The best strategies to create a blended learning environment that can enable immersive learning, such as a more significant learning experience and accessibility to education, are still mostly unknown. The four essential qualities of technology learning tools—time, self-related, learning task, and learning community-related—are most closely tied to the cognitive element, which is a pedagogical concept. This means that instructors can plan learning and teaching using mapping by selecting technological learning tools corresponding with the proper Education 4.0 pedagogies for maximizing immersive, blended learning practices. (Najwa Amanina Bizami, 2022)

Social Presence

Social presence in blended learning entails creating knowledge through student collaboration, engagement, and support, enhancing learning and motivation. As a more modern educational system emerged, blended learning started to be used as one of the strategies for assessing students' learning. This featured in-person lectures, online and offline group projects, online feedback, discussions, and online messaging. The atmosphere that supports higher education is influenced by social presence, mediating between instructional and

cognitive presence. High levels of student interaction, sense-making, and peer support are also prevalent (Mustapha Almasi, Chang Zhu, 2018).

In addition, Aimee L Whiteside and Amy Garrett Dikkers (2016) mentioned that social Presence, or the connectivity between students and instructors, is essential throughout online and mixed-learning environments. Teachers should consider the importance of social Presence when they evaluate and revise their educational strategies to build relationships with and among their students. All technological learning needs emotional support, but blended and online learning programs require it more than others. This suggests that being socially active is crucial for developing the feelings and connections that improve learning.

Social Presence remains a crucial factor for successful online and blended learning experiences. Because retention rates heavily rely on student satisfaction and motivation, it is sometimes described as the level of connection online participants feel. It is advantageous to thoughtfully include social Presence in learning environments since increasing social Presence frequently results in enhanced learning experiences. Social Presence in Online Learning tackles societal change in ways that directly affect the teaching and learning process. (Charlotte Nirmalani Gunawardena, 2017)

Moreover, according to Elson Szeto and Annie YN Cheng (2016), With the advancement of technology, "face-to-face" instruction combined with online learning is now a viable teaching approach in higher education. There hasn't been much research done to contextualize social presence experiences where the

advantages of interactions were examined for boosting learning, despite the fact that this sort of information is not new in higher education. The engagement process was visually and audibly mediated using video conferencing, just like in an online, face-to-face learning community.

The relationship between social presence and blended learning is examined to assess student happiness and make recommendations for social presence tactics and strategies in blended courses. The online system employed several tactics and strategies to foster a social presence, including audio-visual meetings, frequent and thorough feedback, and introductory course films. Student achievement and happiness with learning are positively impacted by social Presence. For the teacher to use approaches or strategies in a blended course that can increase a student's academic engagement, there must be an interaction between the teacher and the students throughout class. (Serkan İZMİRLİ et al., 2019).

Cognitive Presence

By reflection and dialogue, cognitive processes support the "analysis, its building, and confirmation of meaning and understanding within a community of students" (Gutierrez-Santiuste et al., 2015). If you want your students to have a great educational experience that blends their private and public lives, you must first understand cognitive Presence. Meaning and understanding are essential concepts in blended learning to give cognitive Presence for students' learning results.

Morueta et al. (2016) found that in Cognitive Presence, students maintained low levels of cognitive presence while participating in peer-facilitation and concluded that the kinds of questions pursued by peers can positively impact the quality of cognitive presence. The most common student actions were exploration and integration, while activating actions and resolution were the least frequent ones.

In addition, learning through cognitive engagement, which contrasts with content-based learning, gives students more flexibility in building their knowledge base. Beyond acquiring material, inquiry-based learning is a crucial opportunity to master higher-order thinking abilities. (Garrison, 2016). Cognitive Presence is the step to which learners can acquire knowledge and establish skill with course content through the learning opportunities provided within the course. A positive relation between cognitive presences found that higher levels of perceived and actual learning outcomes were observed when cognitive Presence is achieved within an online course.

However, according to Almasi, Zhu And Machumu (2018), Using a blended approach poses several difficulties for how students communicate and display their cognitive Competence. Despite the requirement that students in a BL course be able to create meaning and exchange knowledge that can improve their learning, certain studies suggest that this is not always the case. Cognitive Presence is the ability to produce meaning through teamwork and conversation within the learning community. Aspects of cognitive Presence include puzzlement, information exchange, idea linkages, concept development, and the assessment of the

practicality of solutions. People proceed intentionally from comprehending the issue or problem to exploration, application, and integration in what is termed as a cycle of practical inquiry.

Academic success was found to have a somewhat good correlation with cognitive presence. The affordances of web conferencing systems and the instructor's function favorably impacted the students' cognitive presences. Ü. Akirolu (2019). Cognitive Presence was found to have a moderately positive connection with academic success. The instructor's role and the affordances of web conferencing systems had a positive effect on the students' cognitive presences. Additional research ideas and useful outcomes were also offered about the synchronous instructions.

Teaching Presence

According to Kris MY Law et al,(2019), According to studies, teaching presence provides direct advantages for students' cognitive and social abilities and indirect advantages for their academic achievement. From a teaching perspective, these findings highlight the importance of student enrolment and course design in a blended learning setting. In a BL environment as opposed to an NBL one, the instructional Presence is more strongly influenced by student technology preparedness. These results suggest that an appropriate BL environment fosters community and improves student collaboration. The teaching presence of students may be improved by prior technology training.

In addition, Blended learning encourages contact between students and teachers by using various online learning resources, such as online discussion sheets. A successful integration of traditional classroom instruction with online learning supports asynchronous and cooperative learning among students. While students still prefer face-to-face interactions and opportunities to receive feedback in authentic environments, it's imperative to balance classroom and online learning (Vanslambrouck, Zhu et al., 2018).

However, online text-based learning requires teaching Presence to provide a valuable experience that encourages higher order thinking. Planning the facilitation, providing direct instruction, and creating the course structure are all components of teaching presence. By using teaching presence, instructors and students collaborate to introduce and examine content to increase the group's understanding and sustain the community through meaning-sharing. Previous instruction in learning technology may improve students' participation in class (Shuang Geng et al, 2019).

Students' perceived learning is more strongly correlated with teaching Presence. To help students achieve sustainable development competency in blended learning situations, this study also exhibits practical applications. The teacher's visibility influences the class's participation, teamwork, and dedication. It seeks to support student learning through the course's design and delivery. One effective educational tactic is to be present with students while they are learning.

A cautious, loving, and attentive teaching presence is necessary to create and maintain a community of inquiry. Students' social and cognitive presence is improved by the teacher's teaching presence, which includes discourse facilitation, organization and design indicators, and direct instruction to support mental and social processes for achieving personally meaningful and educationally valuable learning outcomes (Rosa Huiju Chen, 2022).

Academic Engagement in ICT

Student engagement is a particular area of interest, as it has become a central feature within the student educational experience (Melissa Bond, 2019). Teaching presence has a stronger correlation with students' perceived learning. This study also demonstrates practical applications to assist students in achieving sustained growth competency in blended learning environments. The teacher's visibility influences the degree of class involvement, cooperation, and dedication. By the development and delivery of the course, it aims to facilitate student learning. An excellent educational method is to be there with children as they learn. A cautious, focused, and attentive teaching presence is needed to create and sustain a community of inquiry.

The teacher's teaching presence, which includes indicators of design and organization, facilitating discourse, and direct instruction to promote cognitive and social processes for realizing personally meaningful and educationally valuable learning outcomes, enhances the students' social and cognitive presence.

In addition, Hye Jeong Kim et. al (2019) stated that Campus e-learning environments are introduced to university students, who are considered to be digital natives, to improve their academic performance early in their careers. Yet, e-learning doesn't provide accurate results when predicting students' academic achievement. This study aimed to discover more about how university students experience e-learning and how it affects how they see it. Understanding student involvement at university and if this component is linked in student achievement is crucial since educational institutions play a significant role in promoting student engagement. Academic engagement and digital competence in an online learning environment at a university. to look into the relationship between success and classroom motivation.

According to Benjamin Aido (2022), Teachers modified their pedagogical methods during the COVID-19 pandemic, created new lesson plans, and adopted blended learning strategies like the flipped classroom. There are claims that the flipped classroom affects student motivation and improves activities. The use of technology in the school has been found to improve both teacher educators' and students' ICT skills. They believed the strategy encouraged students to actively participate in their education and increased student engagement. They thought it enhanced academic achievement as well. Also, teacher educators reported that their workload had decreased and they had more time to engage with pupils. Moreover, some obstacles and difficulties were noted.

In fact, many universities worldwide use multimedia resources in large classrooms (Joshi et al., 2020). It has been discovered that students' performance

and distraction rates are similar when seated close to a multimedia screen. Innovative information and communications technology (ICT) is also expanding swiftly in the academic sector. The possibilities offered by ICT and social media as cutting-edge instruments for teaching and improving student learning are the subject of much of the current study. University students are introduced to campus e-learning environments to boost their academic performance early in their careers. These students are thought to be digital natives. However, prior research on students' opinions of e-learning shows unreliable outcomes when predicting their academic success.

Anjali Singh et al. (2021) stated that this study is to understand Internet addiction's effect on student academic engagement. Numerous studies explain the detrimental association between Internet addiction and academic performance. However, little research has addressed how excessive internet use undermines academic engagement in students. Also, there is a lot of worry about the need for increased student involvement in Information and Communication Technologies (ICT) courses and how this will affect student outcomes, retention, and general satisfaction.

Social Engagement

Ozer et al. (2017) stated that Students can be better motivated to participate in their courses and other campus activities by engaging in academic and social activities. Engagement can encourage students to stay in school, graduate, enjoy their time there, do well academically, and learn new things.

Although there is a wealth of knowledge on the advantages of engagement and the characteristics of students' academic involvement in the literature, more research is required about students' social engagement in non-learning contexts.

For adolescents' academic and psychological well-being, abilities, peer interactions, and school participation are crucial (Wang et al., 2019; Wang & Hofkens, 2019). Teenagers mostly learn social skills in the context of school, where they interact with peers often and take part in class activities. Also, social actions that combine a social focus with a learning orientation, including forming a study group and contacting other students and teachers to discuss course content in various student populations, high academic engagement is typically linked to contentment and general life satisfaction.

In addition, university students' experiences have always included academic and social activities. Both sorts of contacts appear to have impacted students' performance, even if they were distinct in terms of the activities, they engaged in. In higher education, academic achievement, perseverance, and retention strongly correlate with student social engagement. Less studies have specifically addressed emotional intelligence, even though several have identified how elements of the college experience affect participation. (EI). (Maguire et al., 2017).

However, according to Orlowska et al. (2016), The ability to use and adapt to cultural products is a crucial component of social functioning. The ability to use information technology, such as the internet, which has become a component of

social engagement and exclusion, is necessary at the current stage of social development. It demonstrates the potential effects and restrictions of social exclusion in a few. However, in the authors' opinion, the most excluded social groups: are those who require financial assistance and those with intellectual disabilities. Technology social exclusion may take the form of availability, or rather lack thereof, capabilities and public interest.

Scanlon et al. (2020) Youth who struggle with social anxiety are more likely to work academically, drop out of school, and have unhealthy relationships with their peers, according to research. Due to the nature of science learning objectives, programs highly value peer cooperation and social skills. Teenagers with social anxiety also frequently had reduced peer social support, which decreased their social engagement and hence their performance in science. These findings significantly impact educating teachers and developing school-based treatments that assist socially anxious teenagers in their academic endeavors.

Intellectual Engagement

One reason intellectual stimulation benefits students in the classroom may be that students who felt their teachers were more intellectually stimulating also reported higher levels of virtual drive. Intellectual stimulation in particular raises student engagement and focus, which in turn increases intrinsic drive (Bolkan, 2015; Bolkan & Griffin, 2018).

According to Barbier et al. (2019), the Siegle and McCoach Achievement Orientation Model (AOM) has frequently been utilized in educational settings,

notably in secondary education, to quantitatively study multiple pathways for academic performance among intellectually gifted adolescents. The AOM entails the creation of real-world projects that aid students in honing their abilities in teamwork, negotiation, decision-making, synthesis, and problem-solving.

In addition, Schroeders (2015) explains that Intellectual engagement (TIE) is typically viewed as a crucial feature in understanding individual variations in educational success in advanced academic or professional settings. So, students need to participate in the school's intellectual life to succeed academically and grow socially and intellectually. In the past two decades, research has studied several theoretical viewpoints that attempt to offer thorough explanations for engagement and has demonstrated low levels of involvement, particularly in the classroom.

Moreover, Koyama et al. (2020) Analyze the impact of theories-based school reform initiatives on participation. Additionally, it looks into whether student engagement patterns exist, whether those patterns are the same across grade levels, and whether the subject matter of the class (social studies versus math) has a different impact on engagement.

Intellectual stimulation, interest, and engagement within the college classroom are very important when attempting to heighten cognitively and affect learning (Ellington, 2018). Researchers have looked at factors that predict student interest and involvement in the classroom but have yet to compare them to humor-using instructors. More precisely, it is uncommon to conduct independent research

on student intellectual stimulation, particularly regarding an instructor's sense of humor.

Behavioral Engagement

The student's compliance in class-related tasks is referred to as behavioral engagement. It functions similarly to attentive listening, finishing assignments, active engagement in class discussions, teamwork with other students, and diligent attendance. The term "behavioral engagement" can describe a student's focus, attendance, participation in class, effort, adherence to classroom rules, risk-taking behaviors, and involvement in extracurricular activities. (Joel E Pagan 2018)

More specifically, As evidenced by their time, effort, tenacity, and production, a student's active, visible participation in academic work is referred to as "behavioral engagement." Students' behavioral engagement in reading can be determined by how much time they spend reading and completing reading assignments and how much they respond to those tasks. The grain size of behavioral engagement is captured by a person-oriented definition rather than context-oriented. The behavioral engagement of certain learners in tasks is referred to. (Ivar Braten, 2021).

In addition, Varga (2017) stated that it explores relationships in schools, specifically the interplay between instructors and students—first, a summary of the interactions between teachers and students and the factors that influence them. The implications of teacher-student relationships on education, how the teacher and student behaviors affect educational outcomes, and teacher and student

perspectives and personal traits were all covered in this overview. How to build wholesome relationships was the final section of the study literature review. Relationships in the classroom are cultivated in part through teacher expectations, attitude, familiarity, and communication.

On the other hand, behavioral engagement, as defined by Van Den Noortgate (2016), is the effort, focus, and perseverance teenagers display throughout the planning and carrying out of learning activities. Researchers searched for the causes of behavioral engagement and discovered that social interactions in the classroom affect how involved or disengaged adolescents are in their academic work. According to the study, behavioral engagement enhances teenagers' academic performance, such as grades and test scores, emotional functioning, such as the ability to manage emotions and resolve conflicts, and social functioning, such as relationship and social awareness. According to research, teachers and their peers can have a long-term effect on their behavioral engagement by providing students with social support.

Buzzai et al. (2021) The Self-Determination Theory contends that the interpersonal actions of others have the power to influence and support students' basic psychological needs. The academic community suffers as a result of problematic internet use. No studies haven't been done on the impact of need-supportive interpersonal behaviors on internet addiction, academic engagement, or academic accomplishment. As a result, two studies are being carried out to investigate the relationship between students' perceptions of other people's acts

that supported their basic psychological needs, internet addiction, and academic engagement and its implications on academic success.

The review of related literature provided by this study will give a clear understanding on blended learning and academic performance in ICT among the students in Kolehiyo ng Pantukan. It has a purpose of providing strong evidence, facts, and statements to support that there is a certain problem that needs to be addressed or resolved. In addition, these related studies will help the researchers to better understand the current study or research that are related to support our field of study. It is very important for the researchers to gather information from the other related studies in order to create a suitable hypothesis.

Theoretical and Conceptual Framework

For the theoretical foundation, to support our independent variable we utilized the Inquiry theoretical framework by Garrison, Anderson and Archer, (2000). This includes social presence, cognitive presence and teaching presence. According to the authors, the social presence means that in blended learning, the learners and the instructor have a communication, interaction, and relation in the class. For cognitive presence, the students are cognitively engaged with the course content. And for teaching presence, it is a significant factor in student satisfaction and perceived learning.

On the other hand, for the dependent variable we utilized the Engagement Theory by Kearsley & Shneiderman, (1998) which says that academic engagement involves intellectual Engagement, social engagement and behavioral

engagement. Intellectual engagement is defined by the interest and motivation in the class leading to quality instruction and it is also defined as individual cognitive psychological investment in learning. Social engagement refers to the interaction between students, peers, and instructors that positively contributes to students' overall learning experiences. And behavioral engagement refers to students being involved in learning to the extent that they comply with behavioral norms, such as regular attendance and participation, as well as avoiding disruptive and negative conduct.

Figure 1 shows the conceptual paradigm of the study. The independent variable of the study is the Blended Learning following the indicators namely, social presence, cognitive presence, and teaching presence. The dependent variable of the study is the academic Engagement in ICT following the indicators namely, intellectual engagement, social engagement, and behavioral engagement.

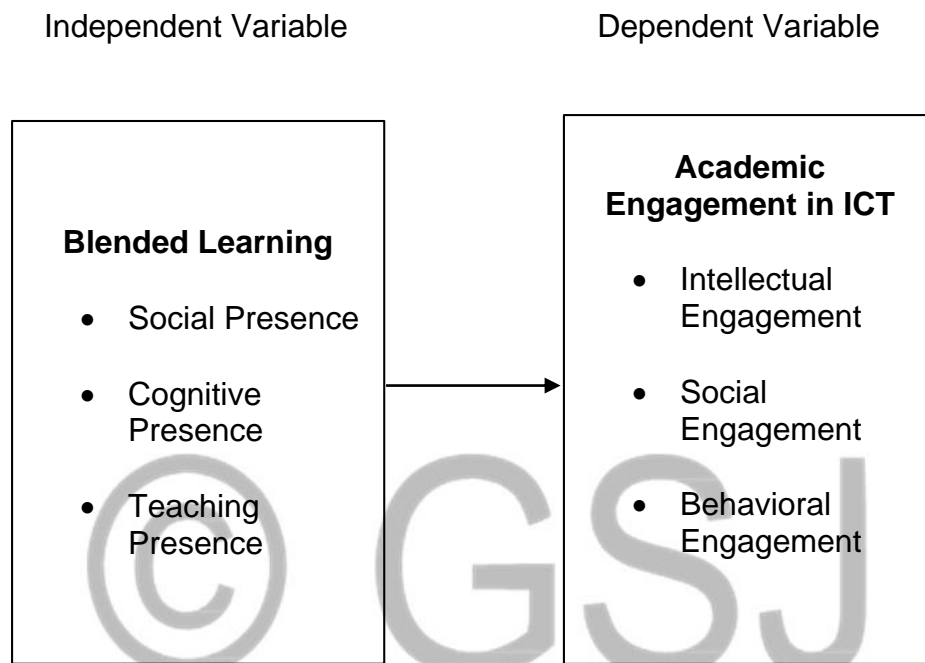


Figure1. Conceptual Framework of the study

Significance of the Study

This study provides information on Blended Learning and Academic Engagement in ICT among the Students in Kolehiyo ng Pantukan.

This study is significant and would be beneficial to the following:

Students. The students will benefit from this study by letting them know how blended learning affects their academic engagement in ICT. The students will also understand the importance of ICT to their studies.

Teachers. This study will also help improve the various classroom factors for teachers, like engaging students, real-time and reliable feedback on teaching methods, new teaching methods, collaborative learning, and time management.

Parents. This study will give the parents ideas on the level of Blended Learning and Academic Engagement in ICT among the Students in Kolehiyo ng Pantukan. This study will also help the parents understand their children's blended learning experiences and academic engagement.

Future Researchers. This study would benefit future researchers because it will serve as their source and guide for their possible future studies.

Definition of Terms

The researchers define the terms conceptually and operationally for clear understanding of the readers.

Blended learning integrates traditional face-to-face learning with technology, the internet, and distance learning (Marhabo Avazmatova, 2020). Blended learning, students have more freedom to customize their learning experiences by fusing technology and digital media with conventional instructor-led classroom activities. Blended learning is a method of teaching that combines face-to-face instruction with online learning.

Academic engagement occurs when students are fully immersed in their learning activities, when the study materials profoundly impact their minds and emotions, and frequently when interacting with classmates (Amerstorfer et al., 2021). Academic participation, which includes the student's labor effort both inside and outside of school, including hours, and academic engagement, which is defined as getting along with teachers, being interested in the subject matter, associated behaviors, and attitudes.

Information and communication technology (ICT) is a convergence of information technology (IT) and communication technology (CT). Information communication technology (ICT) describes the technologies that enable communication-based access to information. This all-encompassing term encompasses any type of communication, including satellite systems, radio, television, cell phones, computer and network hardware, and other devices, as well as the innumerable services and tools that go along with it, such as video conferencing and distant learning (Kingsley A, 2017). Information and communication technology (ICT) is used in schools for learning, communicating, sharing, and storing information. Modern trends including online education, e-

learning, virtual universities, e-coaching, e-education, and e-journals are being used to enhance learning.

Social Presence is the development of a person's in order to create a more motivating and supportive learning environment where students are more motivated and capable of achieving greater success, "social presence" in the classroom is essential Poth, R. D.(2018). In this process, in blended learning, one of the teaching and learning strategies called social presence encourages interaction and dialogue between students and the instructor to improve student learning outcomes.

Cognitive Presence in personal classes can be communicated via facial expressions, body language, and other live Indicators of understanding. It can be more challenging to ensure that students are engaged Virtually (Moore, 2016). In this study, cognitive Presence in online and blended learning will offer various tools to help stand in cognitive presence, such as asynchronous online discussion, video communication, and other activities that guide the learner.

Teaching Presence can be interpreted as the instructor's visibility, known as "teaching presence," affects students' participation and engagement and provides teachers with advice on organizing and constructing courses so students can learn. (Caskurlu et al., 2020). Teaching presence is how the instructor shows up, facilitates the class, and enhances students' cognitive and social Presence. It is a design, facilitation, and direction of cognitive and social processes for realizing personally meaningful and educationally worthwhile learning outcomes.

Intellectual engagement is stimulation that leads to intrinsic motivation by generating positive effects and increasing student attention and engagement (Bolkan et al., 2018). Intellectual engagement assists students in developing a growth mentality, and this is based on established objectives. Teachers provide students with a variety of learning activities. Also, Intellectual engagement is someone or a person that is more interested in logic rather than feelings.

Social Engagement The design and implementation of initiatives that have the potential to significantly enhance the mental health, social, and educational outcomes for adolescents depend on the benefits of social support on academic engagement (Jayarathna, 2015). In this process, Students who display high levels of behavioral, emotional, and cognitive involvement during this process are more likely to succeed academically, feel more a part of their school, and have better social and emotional health.

Behavioral engagement is a reliable and robust predictor of a student's educational success, which includes attention, participation, and effort in academic tasks (Cappella et al. (2018). In this study, behaviourally engaging students in the learning process will increase their attention and focus and motivates them to engage in higher-level critical thinking.

CHAPTER II

METHOD

This chapter presents and highlights the research design, respondents, research instrument, data gathering procedure, and statistical treatment being used in this study.

Research Design

The researchers utilized the quantitative research method for this research study. According to Bhandari (2022), Quantitative research collects and analyzes numerical data. It can find patterns and averages, make predictions, test causal relationships, and generalize results to broader populations. Moreover, this research study uses a descriptive correlational method. According to Pritha Bhandari (2021), descriptive correlational research design investigates relationships between two or more variables without the researcher controlling or manipulating them. The variables that correlated in this study were Blended Learning and Academic Engagement in ICT among the Students in Kolehiyo ng Pantukan.

Research Subject

In this research, KNP students were the respondents, and Simple random sampling was used in this study. Simple Random Sampling is a type of probability sampling in which the researcher randomly selects a subset of participants from a population (Lauren Thomas, 2020). Each member of the population has an equal chance of being selected. Data is then collected from as large a percentage as possible of this random subset.

In determining the sample size, the researchers use a Raosoft calculator. Raosoft calculator is a power analysis that calculates a sample size. With the total population of 3,568, the recommended sample size results is 347 and has been divided into seven (7) departments which resulted in each department having 49.57 or 50 samples. After determining the sample size, the researchers utilized a fishbowl draw or lottery method to choose the respondents determining the number of samples, which will be done by choosing "from a hat" to randomly select the sample.

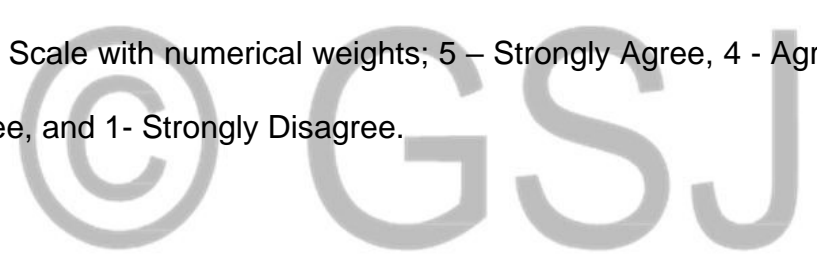
Kolehiyo ng Pantukan student's S.Y 2022-2023	Total Population	Percentage of Distribution	Sample Size
BSED	512	14.35%	50
BTLED- Home Economics	287	8.04%	50
BS in Agricultural Business	457	12.81%	50
Bachelor of Science in Business Administration	942	26.40%	50
BS in Criminology	818	22.93%	50
BS in Entrepreneurship	258	7.23%	50
BS in Tourism Management	294	8.24%	50
TOTAL	3568	100%	350

Table 1: Distribution of the Respondents

Research Instrument

In this study, the researchers utilized a 30- item adopted survey questionnaire from “Information and Communication Technologies in Engineering Education by Xavier Maldague et al., (2016)” and ”Teaching and Learning with Technology: Effectiveness of ICT Integration in Schools” by Simin Ghavifekr et al., (2015). The questionnaire will be used for gathering data regarding the Blended Learning and Academic Engagement in ICT among the students in Kolehiyo ng Pantukan.

The indicators have 5 questions each with a response option following a Five-point Scale with numerical weights; 5 – Strongly Agree, 4 - Agree, 3- Neutral, 2- Disagree, and 1- Strongly Disagree.



--	--	--

For the independent variable, the researchers employed the following Score.

The descriptive equivalents are the following:

Score Range	Mean Rating	Interpretation
5	Strongly Agree	This means that the level of blended learning towards student's academic engagement in ICT is very high.
4	Agree	This means that the level of blended learning towards student's academic engagement in ICT is high.
3	Neutral	This means that the level of blended learning towards student's academic engagement in ICT is moderate.
2	Disagree	This means that the level of blended learning towards student's academic engagement in ICT is low.
1	Strongly Disagree	This means that the level of blended learning towards student's academic engagement in ICT is very low.

For the dependent variable, the researchers employed the following Score range. The descriptive equivalents are the following:

Score Range	Mean Rating	Interpretation
5	Strongly Agree	This means that the level of student's academic engagement in ICT is very high.
4	Agree	This means that the level of student's academic engagement in ICT is high.
3	Neutral	This means that the level of student's academic engagement in ICT is moderate.
2	Disagree	This means that the level of student's academic engagement in ICT is low.
1	Strongly Disagree	This means that the level of blended learning towards student's academic engagement is very low.

Table 2. Survey questionnaire score range

Data Gathering Procedure

Seeking Permission to Conduct the Study. The researchers made a letter addressed to the College President. Another letter was sent to the President of Kolehiyo ng Pantukan for her approval to conduct the study regarding Blended Learning and Academic Engagement in ICT among the Students in Kolehiyo ng Pantukan.

Administration and Retrieval of the Questionnaire. The researchers administered the questionnaire to the respondents through printed questionnaires after approval. After the respondents answered, the researchers will immediately retrieve the questionnaire.

Checking, Collecting, and Processing of Data. The researchers administer, retrieve, check, and collect the data through printed questionnaires and tally it on a Google spreadsheet. These are given to statisticians for computation and analysis. The researchers will make interpretations.

Statistical Treatment of Data. The data gathered was tabulated and analyzed using the statistical tool below.

Mean. This will be used to determine the factors affecting blended learning and student academic engagement in ICT among the Students in Kolehiyo ng Pantukan.

Pearson Correlation. It is a statistical technique for determining whether or not the two variables are often related.

Probability. This is the p-value of obtaining the results and least as extreme as the observed results of a statistical hypothesis test, assuming that the null hypothesis is correct. The p-value will be used as an alternative to rejection points to provide the smallest level of significance at which the null hypothesis would be rejected. A smaller p-value means that there is stronger evidence in favor of the alternative hypothesis.

Ethical Consideration

The following ethical principles will be observed in this study.

Voluntary Participation. The researchers will inform the respondents of their willingness to participate in this study and they will be given a freedom to choose whether they want to participate. This will be determined upon signing their informed assent or consent forms.

Privacy and Confidentiality. The researcher will fully adhere to the Data Privacy Act of the Philippines and will observe the confidentiality of the respondents.

Informed Consent Process. The principle of respect for the participants that they can be involved in research study voluntarily with information about what it means for them to take part.

Recruitment. The respondents in this study shall be determined with inclusion criteria after getting the right sample size.

Risks and Benefits. The researcher will ensure that this study will be free from any risk that will harm the respondents and that the benefits of this study will be for the respondents.

Chapter 3

RESULTS AND DISCUSSION

In this chapter, the researchers present, analyze and interpret the data gathered in textual and tabular forms.

Level of Blended Learning in terms of Social Presence

Table 3 shows the level of blended learning among the students in Kolehiyo ng Pantukan in terms of social presence. The data presented shows that the item got the highest mean is the item number 5, *I feel comfortable interacting with other course participants*, with a mean score of 3.96 described as high. Next is item number 4, *I feel comfortable participating in the course discussions*, with the mean of 3.92 described as high. Item number 1, *Online courses are an excellent medium for social interaction* with the mean score of 3.88 described as high. Item number 3, *Technology introductions enable me to form a sense of online community* with the mean score of 3.83 described as high. The item that got a lowest score is the

item number 2, *I feel comfortable conversing through online medium platforms*, gathered a mean score of 3.75 which is described as high.

The overall mean in terms of Social Presence is 3.87 which is described as HIGH. Thus, this means that the level of blended learning in terms of social Presence is high.

Charlotte Nirmalani Gunawardena claims (2017). Social Presence is still essential for online and blended learning to be successful. Rates of retention are significantly influenced by student motivation and satisfaction. It is advantageous to strategically integrate social Presence into learning environments since it frequently leads to richer learning experiences. It is frequently defined as the level of interpersonal connection among online users.

The power of emotion for learning with technology is addressed through social Presence, or connectivity between the students and instructors, in online and mixed learning contexts. Teachers should consider the importance of social Presence when they evaluate and revise their educational strategies to build relationships with and among their students. This suggests that social interaction is necessary for developing feelings and connections that improve learning (Aimee L Whiteside, Amy Garrett Dikkers, 2016).

Additionally, Serkan ZMRL et al. (2019) stated the connection between social Presence and blended learning, aiming to assess student satisfaction and provide recommendations for social presence techniques and strategies in a

blended course. Creating a social presence in the online course included using techniques and strategies like audio-visual meetings, frequent and thorough feedback, and course orientation videos. It has a favorable impact on both learner achievement and learner satisfaction.

Table 3

Level of Blended Learning in terms of Social Presence

ITEM	MEAN	DESCRIPTION
<i>1. Online courses are an excellent medium for social interaction.</i>	3.88	High
<i>2. I feel comfortable conversing through online medium platforms.</i>	3.75	High
<i>3. Technology introductions enable me to form a sense of online community.</i>	3.83	High
<i>4. I feel comfortable participating in the course discussions.</i>	3.92	High
<i>5. I feel comfortable interacting with other course participants.</i>	3.96	High
OVERALL MEAN	3.87	HIGH

Level of Blended Learning in terms of Cognitive Presence

Table 4, shows the level of blended learning among the Students in Kolehiyong Pantukan in terms of cognitive presence. The data presented shows Item number 1, *The instructor provided useful information from a variety of sources that helped me to learn* and item number 2, *I have been able to apply knowledge created in this course to subsequent class assignments*, have a highest and same mean score of 4.10 which is described as high. Next is item number 5, *I will be able to apply the knowledge created in this course to future work or other non-class activities*, with the mean score of 4.08 described as high. Item number 4, *I can describe ways to test and apply the knowledge created in this course* with the mean score of 4.00 described as high. Item number 3, *I have been able to apply the knowledge created in this course to my work or other non- class related activities*, gathered the lowest mean score of 3.99 which is described as high.

The overall mean in terms of cognitive presence is 4.05 which is described as HIGH. Thus, this means that the level of blended learning in terms of cognitive presence is high.

According to Zhu and Machumu (2018), cognitive Presence refers to a learner's potential to produce meaning through interaction and conversation with other learning community members. Using a hybrid approach poses several difficulties for how students interact and display their cognitive Competence. People proceed intentionally from comprehending the issue or problem to exploration, application, and integration in a cycle of practical inquiry.

Cognitive Presence is the extent to which students may learn about and develop abilities related to the course material through the learning opportunities offered in the course. When cognitive Presence is attained in an online course, better levels of perceived and actual learning outcomes are seen, according to a positive relationship between cognitive presences (Garrison, 2016).

Moreover, Harb & Krish (2020) assert that the use of a mixed learning environment is important for enhancing students' proficiency as well as performance in language acquisition. An important element of blended learning activities and the opportunity for interaction and collaboration with other students is cognitive presence in a learning environment.

Table 4

Level of Blended Learning in terms of Cognitive Presence

ITEMS	MEAN	DESCRIPTION
<i>1. The instructor provided useful information from a variety of sources that helped me to learn.</i>	4.10	High
<i>2. I have been able to apply knowledge created in this course to consecutive class assignments.</i>	4.10	High
<i>3. I have been able to apply the knowledge created in this course to my work or other non-class related activities.</i>	3.99	High
<i>4. I can describe ways to test and apply the knowledge created in this course.</i>	4.00	High

<p><i>5. I will be able to apply the knowledge created in this course to future work or other non-class related activities.</i></p>	<p>4.08</p>	<p>High</p>
<p>OVERALL MEAN</p>	<p>4.05</p>	<p>HIGH</p>

Level of Blended Learning in terms of Teaching Presence

Table 5, shows the level of blended learning among the students in Kolehiyo ng Pantukan in terms of teaching presence. The data presented shows that Item number 3, *The instructor provided clear instructions on how to participate in course learning*, has a highest mean score of 4.23 which is described as high. Next is item number 1, *The instructor clearly communicated important course goals*, with the mean score of 4.19 describe as high. Item number 4, *The instructor was helpful in guiding the class toward agreement/ understanding about course topics that help me to learn*, with the mean score of 4.17 described as high. Next is item number 2, *The instructor clearly communicated important course topics*, with the mean score of 4.15 described as high. The item that got a lowest mean score is the item number 5, *The instructor helped to keep students engaged and participating*

in productive dialogue gathered the lowest mean score of 4.11 which is described as high.

The overall mean in terms of teaching Presence is 4.17 which is described as high. Thus, this means that the level of blended learning in terms of teaching Presence is high.

Teaching presence was found to have direct favorable effects on cognitive Presence and Social Presence as well as good indirect impacts on learning performance, according to Kris MY Law et al. (2019). This suggests an effective blended learning environment fosters community and improves student collaboration. The teaching presence of students may be improved by prior technology training.

Moreover, various online learning technologies make communication between students and teachers possible, including online discussion and blended learning. Students' asynchronous and collaborative learning is supported when combined with traditional classroom instruction and online learning. Students still enjoy face-to-face opportunities to receive feedback in Real settings, so it is essential to balance classroom and online learning (Vanslambrouck, Zhu et al., 2018).

A carefully focused and attentive teaching presence is required. Teaching presence has been recognized as a successful educational strategy during the learning process. Students' social and cognitive Presence is improved by the

teacher's teaching presence, including design and organization indicators, facilitating discourse, and direct instruction to promote cognitive and social processes for realizing personally meaningful and educationally valuable learning outcomes (Rosa Huiju Chen, 2022).

Table 5

Level of Blended Learning in terms of Teaching Presence

ITEM	MEAN	DESCRIPTION
<i>1. The instructor clearly communicated important course goals.</i>	4.19	High
<i>2. The instructor clearly communicated important course topics.</i>	4.15	High
<i>3. The instructor provided clear instructions on how to participate in course learning activities.</i>	4.23	High

<p><i>4. The instructor was helpful in guiding the class towards agreement/understanding about course topics that helped me to learn.</i></p>	<p>4.17</p>	<p>High</p>
<p><i>5. The instructor helped to keep students engaged and participating in productive dialogue.</i></p>	<p>4.11</p>	<p>High</p>
<p>OVERALL MEAN</p>	<p>4.17</p>	<p>HIGH</p>

Summary on the Level of Blended Learning

Table 6 shows the Summary on the Level of Blended Learning in terms of Social Presence, Cognitive Presence, and Teaching Presence. It has an overall mean score of 4.03 which means that the level of Blended Learning is high.

Based on the gathered data, Social Presence gained a mean score of 3.87 described as HIGH. Cognitive Presence gathered a mean score of 4.05 with a description of HIGH. Lastly, Teaching Presence gathered an overall mean of 4.17 with a description of HIGH. Furthermore, the overall mean score for the three indicators of the Blended Learning is 4.03 which is described as HIGH.

One of the most significant and practical research frameworks from social constructivism in online or hybrid learning situations is teaching Presence, social Presence, and cognitive Presence. Despite various definitions of Presence in online or blended learning environments, the Presence of both instructors and students contributed to forming a learning community, particularly in developing shared learning objectives (Ling Li et al., 2022).

Najwa Amanina Bizami (2022), the four basic capabilities of technology learning tools—time, self-related, learning task, and learning community-related—are most closely associated with the pedagogical concept of cognitive factor. This indicates that mapping is helpful for teachers to organize instruction and learning by selecting technological learning tools that match appropriate Education pedagogies for maximizing the immersive, blended learning practices.

Furthermore, (Caskurlu et al., 2020) assert that the effectiveness of a teacher's instruction influences students' learning. Due to physical isolation, face-to-face communication and immediate feedback are diminished in blended learning, yet there is still a link between curricular content and learners.

Table 6

**Summary on the Level of Blended Learning among the Students in Kolehiyo
ng Pantukan**

INDICATORS	MEAN	DESCRIPTION
1. Social Presence	3.87	High
2. Cognitive Presence	4.05	High
3. Teaching Presence	4.17	High
OVERALL MEAN	4.03	HIGH

© GSJ

Level of Academic Engagement of KNP students in terms of Intellectual Engagement

Table 7 shows the level of academic engagement in ICT in terms of intellectual engagement. The data presented shows that item number 3, *I was interested to learn from the proper utilization of ICT courses*, got a highest mean score of 4.06 which is described as high. Next is the item number 5, *I think that ICT improves my learning*, gathered a mean score of 4.01 described as high. Item number 4, *the use of ICT enables me to express my ideas and thoughts better*. The item number 1, *I have appropriate ICT knowledge and skills to apply*, and items number 2, *I took the course to learn more about ICT*, both got a lowest mean score of 3.88 which is described as high.

The overall mean in terms of academic engagement in ICT is 3.97 Which is described as HIGH. Thus, this means that the level of academic engagement in ICT in terms of intellectual engagement is high.

According to Schroeders (2015), intellectual engagement is a critical characteristic for elucidating individual disparities in educational attainment in either highly academic or professionally oriented environments. So, a student's accomplishment and social and cognitive growth depend on their involvement in the academic material.

Beginning their academic careers, students considered digital natives are introduced to university e-learning environments to enhance their academic

performance. In contrast, e-learning predicts academic success inconsistently (Hye Jeong Kim et al., 2019).

Moreover, intellectual stimulation helps pupils in the classroom since, according to studies, those who felt their teachers were more intellectually stimulating also reported feeling more encouraged. In particular, intellectual stimulation increases student attention and engagement, which in turn increases intrinsic drive (Bolkan & Griffin, 2018)

Table 7

Level of Academic Engagement of KNP Students in terms of Intellectual Engagement

ITEMS	MEAN	DESCRIPTION
<i>1. I have appropriate ICT knowledge and skills to apply.</i>	3.88	High
<i>2. I took the course to learn more about ICT.</i>	3.88	High
<i>3. I was interested to learn from the proper utilization of ICT courses.</i>	4.06	High
<i>4 The use of ICT enables me to express my ideas and thoughts better.</i>	4.00	High

<i>5. I think that ICT improves my learning.</i>	4.01	High
OVERALL MEAN	3.97	HIGH

Level of Academic Engagement of KNP students in terms of Social Engagement

Table number 8 shows the level of academic engagement in ICT in terms of social engagement. The data presented shows that item number 1, *I use ICT to communicate with international peers on topics of personal interest*, got a highest mean score of 4.05, described as high. Followed by item number 3, *The use of ICT enables me to be more active and engaging in the lesson*, got a mean score of 4.03, described as high. Item number 2, *I use ICT to communicate with international peers on education related matters*, got a mean score of 4.01 described as high. Next, item number 4, *The use of ICT promotes active and engaging lessons for my best learning experience*, got a mean score of 3.96, described as high. The item got a lowest mean score is the item number 5, *ICTs do not necessarily provide face-to-face intimate interactions between teachers and learners*, got a mean score of 3.78, described as high.

The overall mean in terms of academic engagement in ICT is 3.97 which is

described as HIGH. Thus, this means that the level of academic engagement in ICT in terms of social engagement is high.

Social engagement can compel students better to participate in their classes and other campus activities, claim Ozer et al. (2017). Engaged students are more likely to finish their degrees, have a positive university experience, achieve good marks, and learn new things.

Moreover, social contacts have always been a significant component of university students' experiences. They are an important predictor of academic achievement, perseverance, and retention in higher education, according to Maguire et al. (2017). In higher education, academic achievement, perseverance, and retention are strongly correlated with student social engagement

An essential component is the ability to use information technology, including the internet, which has influenced social inclusion and exclusion. However, the most excluded social groups are those who require financial assistance and those with intellectual disabilities. It illustrates the potential and limitations of social exclusion in a few chosen cases. In the sphere of technology, the availability—or rather, lack thereof—of capabilities and public interest may be used as an illustration of social exclusion (Orlowska et al., 2016)

Table 8

**Level of Academic Engagement of KNP students in terms of Social
Engagement**

ITEMS	MEAN	DESCRIPTION
<i>1. I use ICT to communicate with international peers on topics of personal interest.</i>	4.05	High
<i>2. I use ICT to communicate with international peers on education related matters.</i>	4.01	High
<i>3. The use of ICT enables me to be more active and engaging in the lesson.</i>	4.03	High

<i>4. The use of ICT promotes active and engaging lessons for my best learning experience.</i>	3.96	High
<i>5. ICTs do not necessarily provide face-to-face intimate interactions between teachers and learners.</i>	3.78	High
OVERALL MEAN	3.97	HIGH

Level of Academic Engagement of KNP students in terms of Behavioral Engagement

Table number 9 shows the level of academic engagement in ICT in terms of behavioral engagement. The data presented shows that item number 1, *I am comfortable using technology in classes*, and item number 4, *I think that ICT allows me to learn more in the time I have for studies*, both gathered a highest mean score of 3.97 which I describe as high. Next is item number 5, *I am more behaved and under control with the use of ICT*, with a mean score of 3.93 described as high. Item number 3, *I feel very confident when it comes to learning with technology in class*, with a mean score of 3.90 described as high. Lastly Item number 2, *I think that getting information from ICT is better than using printed materials textbooks*, gathered the lowest mean score of 3.81, which is described as high.

The overall mean in terms of academic engagement in ICT is 3.92 which is

described as high. Thus, this means that the level of academic engagement in ICT in terms of behavioral engagement is high.

According to Joel E. Pagan (2018), behavioral engagement is the student's compliance with class-related tasks and activities, like listening intently and finishing assignments, and the student's diligent class participation, such as teaming up with other students and actively participating in class discussions. The term "behavioral engagement" can describe qualities including student focus, participation in class, effort, adherence to regulations, risk-taking behaviors, and involvement in extracurricular activities.

Behavioral engagement is described as teenagers' effort, attention, and persistence throughout the beginning and execution of learning tasks. According to research, behavioral engagement helps teenagers' academic outcomes, such as grades and performance, emotional outcomes, such as the ability to manage emotions and resolve conflicts, and social outcomes, such as relationship and social awareness (Van Den Noortgate, 2016).

Also, the definition of behavioral engagement states that it is the students' active, visible participation in academic assignments as demonstrated by their time, effort, persistence, and production. Individual learners' participation in specific tasks is referred to as behavioral engagement, and a definition of behavioral engagement captures a person-oriented rather than a context-oriented grain size (Ivar Braten, 2021)

Table 9

Level of Academic Engagement of KNP students in terms of Behavioral Engagement

ITEMS	MEAN	DESCRIPTION
<i>1. I am comfortable using technology in classes.</i>	3.97	High
<i>2. I think that getting information from ICT is better than using printed materials/textbooks.</i>	3.81	High
<i>3. I feel very confident when it comes to learning with technology in class.</i>	3.90	High
<i>4. I think that ICT allows me to learn more in the time I have for studies.</i>	3.97	High
<i>5. I am more behaved and under control with the use of ICT.</i>	3.93	High
OVERALL MEAN	3.92	HIGH

Summary on the Level of Academic Engagement of KNP students in ICT

Table 10 shows the summary of Level of Academic Engagement of KNP students in ICT in terms of Intellectual Engagement, Social Engagement, and Behavioral Engagement. It has an overall mean score of 3.95 with a description of HIGH which means that the level of academic engagement of KNP students in ICT HIGH.

Based on the gathered data, Intellectual Engagement gained an overall mean score of 3.97 described as HIGH. Next is Social Engagement with an overall mean score of 3.97. And lastly, is the Behavioral Engagement gained an overall mean of 3.92 described as HIGH. Furthermore, the overall mean score of the Three indicators of Academic Engagement in ICT is 3.95 which has a description of HIGH.

Bixter (2018) Intellectual engagement and behavioral engagement of students have been two commonly used dimensions of student engagement with the new addition of social engagement. Also, there is an enormous diversity of educational technology provided online for teachers and students.

Tomovic (2021) stated that When students are intellectually committed and absorbed in their academic work, they are more likely to go above and beyond what is required and to appreciate the challenges of learning. This is referred to as intellectual engagement. Social engagement is defined as contact between pupils, teachers, and peers that enhances pupils' overall learning experiences. The level

of student networking and communication for academic and social objectives through online forums, blogs, and mobile devices is referred to as social engagement in learning settings. Students are said to be engaged in learning when they follow behavioral norms, such as regular attendance and involvement, and when they avoid disruptive and unruly behavior.

Effective instruction must include motivating students and engaging in behaviors that stimulate the mind is one approach to accomplish this goal. Academic engagement, or the degree to which students are active in, connected to, and devoted to the academic and extracurricular activities in school, is crucial for averting academic failure, fostering competence, and impacting a variety of adolescent outcomes (Bolkan, 2015).



Table 10

**Summary on the Level of Academic Engagement of KNP students in
ICT**

INDICATORS	MEAN	INTERPRETATION
Intellectual Engagement	3.97	High
Social Engagement	3.97	High
Behavioral Engagement	3.92	High
OVERALL MEAN	3.95	HIGH

Relationship Between the Level of Blended Learning and Level of Academic Engagement of KNP Students in ICT

Table 11 shows the relationship between the level of Blended Learning and the level of Academic Engagement of KNP students in ICT.

According to the findings, the r-value is at 0.703 which indicates a positive correlation of the two variables, the independent variable and dependent variable. Moreover, the p-value is tested at 0.05 level of significance and in this study, the result of p-value is 0.001 which is lesser than the level of significance $\alpha = 0.05$. Therefore, the decision to the null hypothesis is rejected. This means that the level of Blended Learning and level of Academic Engagement of KNP students in ICT is significantly correlated.

The coefficient of determination, denoted R^2 or r^2 , is the proportion of the variance in the dependent variable that is predictable from the independent variable. In other words, 49% of the variation is for the student academic engagement in ICT. The remaining 51% is associated with blended learning on academic engagement in ICT among the students in Kolehiyo ng Pantukan.

The significant relationship between the level of blended learning and the level of academic engagement of KNP students in ICT was supported by Alsalhi et al., (2019), who stated that blended learning can positively affect students'

learning engagement and improves the student learning experience. Furthermore, applying blended learning to teaching improves student academic achievement. He added that growth in student accomplishment is positively influenced by personality, learning style, and satisfaction. For instance, integrating learning helps students become more independent by strengthening their communication and critical thinking abilities. Blended learning is a teaching approach that positively impacts students' academic engagement and teachers' instruction.

Therefore, blended learning positively affects the KNP students' engagement in ICT. This means that even in combined online learning and face-to-face classes during the COVID-19 pandemic, students can still maintain their engagement or participation in their studies, specifically in Information and Communication Technology (ICT).



Table 11

Relationship Between the Level of Blended Learning and Level of Academic Engagement of KNP Students in ICT

VARIABLES	r - value	Interpretation	p- value a=0.05	Decision on Ho	Conclusion on Relationship
A. Blended Learning B. Academic Engagement in ICT	0.703	Positive Correlation	.001	Rejected	Significantly Correlated
Coefficient of Determination (r^2)					0.494

Chapter 4

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the findings, the conclusions derived from the findings, and the recommendation of the researchers, which are based on the findings and conclusions of the study.

Summary of findings

1. The level of blended learning in terms of Teaching presence with a mean score of 4.17, Cognitive Presence with a mean score of 4.05, and Social Presence with a mean score of 3.87 respectively. The independent variable got an overall mean of 4.03 with a description of strongly agree. This means that the level of blended learning towards student's academic engagement in ICT is very high.
2. The level of academic engagement of KNP students in ICT in terms of Intellectual engagement with a mean score of 3.97, followed by Social engagement with a mean score of 3.97 and lastly, Behavioral engagement with a mean score of 3.92. The dependent variable got an overall mean of 3.95 with a description of agree. This means that the level of blended learning towards student's academic engagement in ICT is high.
3. The null hypothesis that there is no significant relationship between the level of blended learning and academic engagement in ICT is rejected since the P- value is 0.001 and below the α - 0.05.

Conclusion

In light of the findings, the following conclusions were drawn:

1. The level of blended learning is very high. Therefore, blended learning positively impacts KNP students' academic engagement in ICT.
2. The level of academic engagement in ICT is high. Therefore, student academic engagement in Information and Communication Technology (ICT) is visible under blended learning.
3. A significant relationship exists between blended learning and the academic engagement of KNP students in ICT.

Recommendation:

Based on the preceding conclusion, the researchers arrived at the following recommend

1. For the teachers, you may put the students at the center of the learning process that can allow students to advance at their own pace and positively impact the students' academic engagement in the experimental class.
2. For the students, you can be consistent in your engagement in academic matters for you to catch up even in blended learning.
3. For the parents, maintain your parental involvement in your child's school matters in terms of giving financial, emotional and moral support in order to raise students' accomplishment, self-esteem, and behavior, which can impact how well a student performs to engage in academics.

REFERENCE

- A Maseda. (2022) Google scholar. Retrieved November 21, 2022, from <https://scholar.google.com/>
- Adams Becker, S.; Cummins, M.; Davis, A.; Freeman, A.; Hall Giesinger, C.; Ananthanarayanan, V. NMC Horizon Report: 2017 Higher Education Edition. Austin, Texas: The New Media Consortium, 2017 | Semantic Scholar <https://www.semanticscholar.org>
- Bond, M., & Bedenlier, S. (2019, September 10). Journal of Interactive Media in Education. Retrieved December 25, 2022, from <https://jime.open.ac.uk/articles/10.5334/jime.528/>
- Bolkan. (2022). Intellectually stimulating students' intrinsic motivation: The mediating influence of affective learning and student engagement.
- Butler, M. W., Morgan, M., Sheard, J. I., Simon, null, Falkner, K., & Weerasinghe, A. (1970, January 1). *Initiatives to increase engagement in first-year ICT*. Monash University. Retrieved March 12, 2023, from <https://research.monash.edu/en/publications/initiatives-to-increase-engagement-in-first-year-ict>
- Czas wolny jako środowisko życia. Perspektywa pedagogiczna. Wybrane problemy. (n.d.). Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- C., Gikandi, J. W., Berger, T., Birch, D., Bortz, J., ... Fluck, A. (2018, November 19). Implementing Computer-based assessment – a web-based mock Heather menzies. (n.d.). Time, stress and intellectual engagement in academic work: Exploring gender difference. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- DR;, C. E. K. H. Y. N. J. W. J. n (2016). Classroom peer relationships and behavioral engagement in elementary school: The role of social network equity no. American journal of community psychology. Retrieved November 21, 2022, from <https://pubmed.ncbi.nlm.nih.gov/24081319/>
- Dickfos, J., Cameron, C., & Hodgson, C. (2015, April). Blended learning: Making an impact on assessment and self-reflection in accounting education. Education + Training. Retrieved November 21, 2022, from <https://www.emerald.com/insight/content/doi/10.1108/ET-09-2012-0087/full/html>
- Elise Cappella. (2019). Classroom peer relationships and behavioral engagement in elementary school: The role of social network equity. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>

- Emilda Josephine. (2015). (PDF) ICT and blended learning - researchgate. google. Retrieved November 21, 2022, from <https://www.researchgate.net/publication/348927942> ICT and Blended Learning
- Edu, A. S. (2022). Toward Improving Students' Academic Engagement: The Role of Educational Technology. In *Delivering Distinctive Value in Emerging Economies* (pp. 323-345). Productivity Press. <https://www.taylorfrancis.com>
- Ghavifekr, S. ghavifekr, & Rosdy, W. A. W. (2015). [PDF] teaching and learning with technology: Effectiveness of ICT integration in schools: Semantic scholar. Undefined. Retrieved December 3, 2022, from <https://www.semanticscholar.org/paper/Teaching-and-Learning-with-Technology%3A-of-ICT-in-Ghavifekr-Rosdy/cd2bcafd57465839678f7968fd79c6feb4c5badf>
- Heliyon (2022). The effectiveness of blended learning on students' academic achievement, self-study skills and learning attitudes: A quasi-experiment study in teaching the conventions for coordinates in the plane. Heliyon. Retrieved February 24, 2023, from <https://www.sciencedirect.com/science/article/pii/S2405844022039457>
- Hrastinski, S. (2019). What do we mean by blended learning?. *TechTrends*, 63(5), 564-569 <https://link.springer.com>
- Juliet Aleta R Villanueva. (2018). Google scholar. Teaching Presence in K-12 Blended Learning Classes under the Alternative Delivery Mode. Retrieved November 21, 2022, from <https://scholar.google.com/>
- J Ben Arbaugh. (2016). Google scholar. Does the community of inquiry framework predict outcomes in online MBA courses? Retrieved November 21, 2022, from <https://scholar.google.com/>
- Jeroen Bourgonjon. (2019). Google scholar. Parental acceptance of digital game-based learning. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- Jennifer Dickfos. (2020). Learning from the problems and challenges in blended learning: Basis ... google scholar. Retrieved November 21, 2022, from <https://www.researchgate.net/publication/347885055> Learning from the problems and challenges in blended learning Basis for faculty development and program enhancement
- Joni M Lakin. (2019). Google scholar. Spatially gifted, academically inconvenienced: Spatially talented students experience less academic engagement and more behavioural issues than other talented students. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- Jaramillo, S. (2018). Adams Becker, S.; Cummins, M.; Davis, A.; Freeman, A.; Hall Giesinger, c.; Anathanarayanan, v. NMC Horizon Report: 2017 Higher Education

- Edition. Austin, Texas: The New Media Consortium, 2017: Semantic scholar. Undefined. Retrieved December 5, 2022, from <https://www.semanticscholar.org/paper/Adams-Becker%2C-S.%3B-Cummins%2C-M.%3B-Davis%2C-A.%3B-Freeman%2C-Jaramillo/77d8e3efdf709b54772f5ebef93f8693540488ba>
- Kristina mouzakis. (2019). Academic and Social Engagement in University Students: Exploring Individual Differences and Relations with Personality and Daily Activities. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- Kearsley, G., & Shneiderman. (2020). Engagement theory: A framework for technology-based teaching and ... Retrieved November 21, 2022, from <https://cpbus-e1.wpmucdn.com/blogs.uoregon.edu/dist/e/17226/files/2020/11/Engagement-Theory-1.pdf>
- Kurniawan, H. (n.d.). Application of e-learning for online learning during the COVID-19 pandemic at University of Pembangunan Panca budi. Journal of Applied Engineering and Technological Science (JAETS). Retrieved March 12, 2023, from <https://journal.yrpiiku.com/index.php/jaets/article/view/973>
- Moore, R. L. (2016). Interacting at a distance: Creating engagement in online learning environments. IGI Global. Retrieved November 21, 2022, from <https://www.igi-global.com/chapter/interacting-at-a-distance/140655>
- Ming- Te Wang. (2020). An integrative development-in-sociocultural-context model for children's engagement in learning. School of Education. Retrieved November 21, 2022, from <https://www.education.pitt.edu/people/mtwang>
- Poth, R. D. (2018). Social presence in online learning. IGI Global. Retrieved November 21, 2022, from <https://www.igi-global.com/chapter/social-presence-in-online-learning/200149>*
- Rebecca maguire. (2017). Engaging students emotionally: The role of Emotional Intelligence in predicting cognitive and affective engagement in Higher Education. Taylor & Francis. Retrieved November 21, 2022, from <https://www.tandfonline.com/doi/abs/10.1080/07294360.2016.1185396?journalCode=cher20>
- R.K. Kavitha, W. Jaisingh. (2023, March 1). International Journal of Recent Technology and Engineering (IJRTE). Retrieved March 12, 2023, from <https://www.ijrte.org/>
- Rebecca Maguire. (2018). Engaging students emotionally: The role of emotional intelligence in predicting cognitive and affective engagement in higher education. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>

- Rovert L. Moore. (2017). Interacting at a distance: Creating engagement in online learning environments. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- Ronnel B. King. (2015). The academic rewards of socially-oriented happiness: Interdependent happiness promotes academic engagement. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- Rebecca Maguire. (2017). Google scholar. Engaging students emotionally: The role of emotional intelligence in predicting cognitive and affective engagement in higher education. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- Rebecca Maguire. (2017). Engaging students emotionally: The role of emotional intelligence in predicting cognitive and affective engagement in higher education. Retrieved November 21, 2022, from <https://scholar.google.com/>
- Rosemary Fisher. (2018). The positive relationship between flipped and blended learning and student engagement, performance and satisfaction. Google Scholar. Retrieved November 21, 2022, from https://www.researchgate.net/profile/Rosemary-Fisher3/publication/328003538_The_positive_relationship_between_flipped_and_blended_learning_and_student_engagement_performance_and_satisfaction/links/5bce4c15a6fdcc204a011be0/The-positive-relationship-between-flipped-and-blended-learning-and-student-engagement-performance-and-satisfaction.pdf
- Secil caskurlu. (2016.). A meta-analysis addressing the relationship between teaching presence and students' satisfaction and learning. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- Shuang Geng. (2017). Google scholar. Investigating self-directed learning and technology readiness in blending learning environment. Retrieved November 21, 2022, from <https://scholar.google.com/>
- San bolkan. (2018). Intellectually stimulating students' intrinsic motivation: The mediating influence of affective learning and student engagement. Retrieved November 21, 2022, from <https://scholar.google.com.mx/>
- San Bolkan. (2016). Google scholar. Intellectually stimulating students' intrinsic motivation: The mediating influence of affective learning and student engagement. Retrieved November 21, 2022, from <https://scholar.google.com/>
- Sean P. Mackinnon. (2018). Perceived Social Support and Academic Achievement: Cross-lagged Panel and Bivariate Growth Curve Analyses. Google scholar. Retrieved November 21, 2022, from http://www.savvystatistics.com/wp-content/uploads/2014/05/mackinnon_2011_JYA.pdf
- Thorn bury. (n.d.). *(PDF) blended learning - researchgate*. Retrieved March 12, 2023, from https://www.researchgate.net/publication/343690666_Blended_Learning

V;, O. D. J. B.-M. (2019). Personality and the prediction of consequential outcomes. Annual review of psychology. Retrieved November 21, 2022, from <https://pubmed.ncbi.nlm.nih.gov/16318601/>

Waraporn Suebwongsuawan. (2020). The 5-point scale interpretation. Google. Retrieved November 21, 2022, from https://www.researchgate.net/figure/The-5-point-scale-interpretation-tbl1_339268064

© GSJ

APENDICES A



Kolehiyo ng Pantukan

Juan A. Sarenas Campus, Kingking, Pantukan, Compostela Valley Province

Letter of Intent

February 6, 2023

FDR. DR. JOCELYN H. HUA, DFRIEdr
College President
Kolehiyo ng Pantukan
Juan A. Sarenas Campus, King-King, Pantukan
Davao de Oro, 8809, Philippines

Dear Ma'am;

A Pleasant Morning with Full of Love!

We, the thirdyear students of Kolehiyo ng Pantukan taking up the Bachelor of Technology and Livelihood Education major in Home Economics is currently enrolled in the subject of Research 2 with its Quantitative Research. To fulfill the purpose, students enrolled under the subject must undergo a survey as a source of basic information relevant to the study.

Moreover, we would like to express our intent to conduct this research study about the Blended Learning and Academic Engagement in ICT among the Students in Kolehiyo ng Pantukan.

Hoping for your positive response on this matter, thank you very much and more power.

Respectfully Yours;

REYNILDA ALAMIS
CHARISSE MAE MAPANTOC
CHARMAINE JANE MAPANTOC

Noted:

MHARFE M. MICARUZ, MAEd

PROGRAM HEAD

SANNY DARAMAN, MAHEED

Under Thesis Adviser

Approved by:

DR. LYNARD BOBBY T. ASIRIT, CESE
Vice President Research Director

FDR. DR. JOCELYN H. HUA, DFRIEdr
College President

APENDICES B

LETTER OF PERMISSION TO CONDUCT STUDY

February 6, 2023

FDR. DR. JOCELYN H. HUA, DFRIEdr

College President Kolehiyo ng Pantukan

Juan A Serenas Campus, KingkingPantukan,

Davao de Oro

Dear Dr. Hua,

The undersigned are currently working on their research entitled "**BLENDED LEARNING AND ACADEMIC ENGAGEMENT IN ICT AMONG THE STUDENTS IN KOLEHIYO NG PANTUKAN**" as a requirement for their degree of Bachelor of Technology and Livelihood Education major in Home Economics.

In this regard, the researchers would like to request your approval to conduct the Study. Also, the confidentiality of the data will be an utmost priority. Looking forward to your favorable response on this said request.

Sincerely yours,

REYNILDA G. ALAMIS

CHARISSE MAE L. MAPANTOC

CHARMAINE JANE L. MAPANTOC

Researchers

Noted by:


SANNY DARAMAN, MAHEED

Research Adviser


MHARFE M. MICAROZ, MAed

Program Head


DR. LYNARD BOBBY L. ASIRIT, CESE

Research Director

Approved by:


FDR. DR. JOCELYN H. HUA, DFRIEd

College President

APENDICES C

VALIDATION SHEET FOR RESEARCH QUESTIONNAIRE

TITLE	Blended Learning and Academic Engagement in ICT among the Students in Kolehiyo ng Pantukan
--------------	--

Name of Evaluator:	Eufrosina P. Mines, EdD
Highest Degree:	Doctor of Education
Kindly check the appropriate box for your rating.	
Points Equivalent	5 - Excellent 4 - Very Good 3 - Good 2 - Fair 1 - Poor

ITEMS	5	4	3	2	1
1. Clarity of Directions And Items <i>The vocabulary level, language, structure, and conceptual level of questions suit the level of participants. The best directions and the items are written in a clear and understandable manner.</i>	/				
Presentation and Organization of Items <i>The items are presented and organized in a logical manner.</i>	/				
Suitability of Items <i>Each item is appropriate and represents the substance of the research. The questions are designed to determine the conditions, knowledge, perception and attitudes that are supposed to be measured.</i>		/			
4. Adequateness of Items per Category or Indicator <i>The items represent the coverage of research adequately. The number of questions per area category is representative enough of all the questions needed for research.</i>		/			
5. Attainment of Purpose <i>The instruments as well as a whole, fulfill the objectives for which it was constructed.</i>	/				
6. Objectivity <i>Each item questions only one specific answer or measures only one behavior and no aspect of the questionnaire is a suggestion of the researcher.</i>	/				
7. Scale and Evaluation Rating Scale (for survey questionnaires only) <i>The scale accepted is appropriate for the items</i>	/				
REMARKS: Research questionnaire may now be administered to your research respondents.					



VALIDATION SHEET FO RESEARCH QUESTIONNAIRE

TITLE	Blended Learning and Academic Engagement in ICT among the Students in Kolehiyo ng Pantukan
--------------	---

Name of Evaluator:	Lynard Bobby L. Asirit, PhD, CESE
Highest Degree:	PD StraMa
<i>Kindly check the appropriate box for your rating.</i>	
Points Equivalent	5 - Excellent 4 - Very Good 3 - Good 2 - Fair 1 - Poor

ITEMS	5	4	3	2	1
1. Clarity of Directions And Items <i>The vocabulary level, language, structure, and conceptual level of questions suit the level of participants. The best directions and the items are written in a clear and understandable manner.</i>	/				
Presentation and Organization of Items <i>The items are presented and organized in a logical manner.</i>	/				
Suitability of Items <i>Each item is appropriate and represents the substance of the research. The questions are designed to determine the conditions, knowledge, perception and attitudes that are supposed to be measured.</i>	/				
4. Adequateness of Items per Category or Indicator <i>The items represent the coverage of research adequately. The number of questions per area category is representative enough of all the questions needed for research.</i>	/				
5. Attainment of Purpose <i>The instruments as well as a whole, fulfil the objectives for which it was constructed.</i>	/				
6. Objectivity <i>Each item questions only one specific answer or measures only one behavior and no aspect of the questionnaire is a suggestion of the researcher.</i>	/				
7. Scale and Evaluation Rating Scale (for survey questionnaires only) <i>The scale accepted is appropriate for the items</i>	/				
REMARKS: Approved.					

VALIDATION SHEET FO RESEARCH QUESTIONNAIRE

TITLE	Blended Learning and Academic Engagement in ICT among the Students in Kolehiyo ng Pantukan
--------------	---

Name of Evaluator:	ALBEB Q. TARAY, MBA
Highest Degree:	MBA
Kindly check the appropriate box for your rating.	
Points Equivalent	5 - Excellent 4 - Very Good 3 - Good 2 - Fair 1 - Poor

ITEMS	5	4	3	2	1
1. Clarity of Directions And Items <i>The vocabulary level, language, structure, and conceptual level of questions suit the level of participants. The best directions and the items are written in a clear and understandable manner.</i>	/				
Presentation and Organization of Items <i>The items are presented and organized in a logical manner.</i>	/				
Suitability of Items <i>Each item is appropriate and represents the substance of the research. The questions are designed to determine the conditions, knowledge, perception and attitudes that are supposed to be measured.</i>	/				
4. Adequateness of Items per Category or Indicator <i>The items represent the coverage of research adequately. The number of questions per area category is representative enough of all the questions needed for research.</i>	/				
5. Attainment of Purpose <i>The instruments as well as a whole, fulfil the objectives for which it was constructed.</i>	/				
6. Objectivity <i>Each item questions only one specific answer or measures only one behavior and no aspect of the questionnaire is a suggestion of the researcher.</i>	/				
7. Scale and Evaluation Rating Scale (for survey questionnaires only) <i>The scale accepted is appropriate for the items</i>	/				
REMARKS: APPROVED.					

ALBEB Q. TARAY, MBA
Signature over Printed Name



OVERALL VALIDATION TALLY SHEET

Kolehiyo ng Pantukan

Juan A. Sarenas Campus, Kingking, Pantukan, Davao de Oro



Validator	Score
1	33
2	31
3	31
Average	95
Remarks	

Verified:

LYNARD BOBBY L. ASIRIT, PhD, CESE
VP for Research

APENDICES D

GENERAL INSTRUCTION

Please Check Appropriate Box

Type of Questionnaire

ADOPTED		ADAPTED		RESEARCHER MADE	
---------	--	---------	--	-----------------	--

For ADOPTED

Note:

1. If ADOPTED, upload a screenshot of your email request to the original author.
2. Upload the approved returned e-mail if any.
3. Attached the original instrument on the succeeding page.
4. Paste the accessible link of the instrument.

LINK (URL):

https://l.facebook.com/l.php?u=https%3A%2F%2Fwww.researchgate.net%2Ffigure%2FQuestionnaire-on-students-attitude-towards-ICT-in-foreign-language-learning_tbl1_309021422%3Ffbclid%3DIwAR1OAEUXpgMZn-dPBifIGD1KwiE8MghpapYcEkcVBC2Oe1zPT5lccv9P_bs&h=AT16EcjU1RhVd1GvhcBjRUS_6aCur5t_a_5oHN92juhQrtd718-gjBFZUm-mGCi4p_kYva5Bvuh-0NdZN4mMmhVMT_ngCuArAfAFKZ2IV3rN96uaLmw610KYIUejQfSIHC29AvnVFJEuF--i-E31DA

<https://www.semanticscholar.org/paper/Teaching-and-Learning-with-Technology%3A-of-ICT-in-Ghavifekr-Rosdy/cd2bcafd57465839678f7968fd79c6feb4c5badf>

RESEARCH INSTRUMENT
(Survey Questionnaire)

Research Title:

BLENDED LEARNING AND ACADEMIC ENGAGEMENT IN ICT AMONG THE STUDENTS IN KOLEHIYO NG PANTUKAN

We are currently conducting a research study titled, ***BLENDED LEARNING AND ACADEMIC ENGAGEMENT IN ICT AMONG THE STUDENTS IN KOLEHIYO NG PANTUKAN***. In this regard, We would like to ask you to become one of the respondents of this study. We respectfully request that you take the time and effort to complete the questionnaire and answer all pertinent questions. Your feedback on the statements in the questionnaire will serve as the study's primary data. Rest assured that all information you provide through this questionnaire will be held with confidentiality in accordance with the RA 10173 Sec. 8 also known as Data Privacy Act on confidentiality.

Please answer the survey questionnaire objectively and with all honesty by checking on the appropriate boxes that represent your level of agreement. We appreciate your cooperation and thank you so much.

Respectfully yours,

Alamis, Reynilda G.

Mapantoc, Charisse Mae L.

Mapantoc, Charmaine Jane L.

RESEARCHERS

PART I: BLENDED LEARNING

Instructions: kindly check (/) the boxes that accurately describe your choices using the five-point scale below.

5- Strongly Agree

This means that the level of blended learning towards student's academic engagement in ICT is very positive.

4- Agree

This means that the level of blended learning towards student's academic engagement in ICT is positive.

3- Neutral

This means that the level of blended learning towards student's academic engagement in ICT is moderate.

2- Disagree

This means that the level of blended learning towards student's academic engagement in ICT is negative.

1- Strongly Disagree

This means that the level of blended learning towards student's academic engagement in ICT is very negative.

SOCIAL PRESENCE

STATEMENT	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
1. Online courses are an excellent medium for social interaction.					
2. I feel comfortable conversing through online medium platforms.					
3. Technology introductions enable me to form a sense of online community.					
4. I feel comfortable participating in the course discussions.					
5. I feel comfortable interacting with other course participants.					

COGNITIVE PRESENCE

STATEMENT	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
1. The instructor provided useful information from a variety of sources that helped me to learn.					
2. I have been able to apply knowledge created in this course to consecutive class assignments.					
3. I have been able to apply the knowledge created in this course to my work or other non-class related activities.					
4. I can describe ways to test and apply the knowledge created in this course.					
5. I will be able to apply the knowledge created in this course to future work or other non-class related activities.					

TEACHING PRESENCE

STATEMENT	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
1 The instructor clearly communicated important course goals.					
2. The instructor clearly communicated important course topics.					
3. The instructor provided clear instructions on how to participate in course learning activities.					
4. The instructor was helpful in guiding the class towards agreement/understanding about course topics that helped me to learn.					
5. The instructor helped to keep students engaged and participating in productive dialogue.					

PART II: ACADEMIC ENGAGEMENT IN ICT

Instructions: kindly check (/) the boxes that accurately describe your choices using the five-point scale below.

5- Strongly Agree

This means that the level of student's academic engagement in ICT is very positive.

4- Agree

This means that the level of student's academic engagement in ICT is positive.

3- Neutral

This means that the level of student's academic engagement in ICT is moderate.

2- Disagree

This means that the level of student's academic engagement in ICT is negative.

1- Strongly Disagree

This means that the level of blended learning towards student's academic engagement is very negative.

INTELLECTUAL ENGAGEMENT

STATEMENT	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
1. I have appropriate ICT knowledge and skills to apply.					
2. I took the course to learn more about ICT.					
3. I was interested to learn from the proper utilization of ICT courses.					
4. The use of ICT enables me to express my ideas and thoughts better.					
5. I think that ICT improves my learning.					

SOCIAL ENGAGEMENT

STATEMENT	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
1. I use ICT to communicate with international peers on topics of personal interest.					
2. I use ICT to communicate with international peers on education related matters.					
3. The use of ICT enables me to be more active and engaging in the lesson.					
4. The use of ICT promotes active and engaging lessons for my best learning experience.					
5. ICTs do not necessarily provide face-to-face intimate interactions between teachers and learners.					

BEHAVIORAL ENGAGEMENT

STATEMENT	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
1. I am comfortable using technology in classes.					
2. I think that getting information from ICT is better than using printed materials/textbooks.					
3. I feel very confident when it comes to learning with technology in class.					
4. I think that ICT allows me to learn more in the time I have for studies.					
5. I am more behaved and under control with the use of ICT.					

Google form https://docs.google.com/forms/d/1bC-G9DciujHmhDw9HiLh5o9X-3dlCgQ3bwCy_gxZoMU/edit?fbclid=IwAR0oqQrIkkaH2t9eT4d1hpT78PATgJfjbJPg7C106tfRdidJCIP3CXOzfu0

CURRICULUM VITAE



REYNILDA G. ALAMIS

Purok 5-C Poblacion, Banaybanay, Davao Oriental

Email Address: reynilda_alamis@knp.edu.ph

Contact #: 09309421672

Personal information

Birthdate: May 21, 2002
Sex: Female
Religion: Baptist
Father's name: Reynaldo B. Alamis
Mother's name: Joeliny G. Alamis

Educational Attainment

Elementary: Banaybanay Central Elementary School
Secondary: Manuel B. Gunez Sr. National High School
Tertiary: Kolehiyo ng Pantukan



CHARISSE MAE L. MAPANTOC

Purok, Anahaw Caganganan Banaybanay Davao Oriental

Email address: charissemae_mapantoc@knp.edu.ph

Contact #: 09565000131

Personal information

Birthdate: April 4, 2002

Sex: Female

Religion: Roman Catholic

Father's name: Alexander C. Regasajo

Mother's name: Marites L. Mapantoc

Educational Attainment

Elementary: Caganganan Elementary School

Secondary: Manuel B. Gunez Sr. National High School

Tertiary: Kolehiyo ng Pantukan



CHARMAINE JANE L. MAPANTOC

Purok, Anahaw Caganganan Banaybanay Davao Oriental

Email address: charmainejane_mapantoc@knp.edu.ph

Contact #: 09951018687

Personal information

Birthdate: April 4, 2002

Sex: Female

Religion: Roman Catholic

Father's name: Alexander C. Regasajo

Mother's name: Marites L. Mapantoc

Educational Attainment

Elementary: Caganganan Elementary School

Secondary: Manuel B. Gunez Sr. National High school

Tertiary: Kolehiyo ng Pantukan