European Journal of Education Studies
ISSN: 2501 - 1111
ISSN-L: 2501 - 1111
Available on-line at: www.oapub.org/edu

DOI: 10.46827/ejes.v9i7.4376 Volume 9 | Issue 7 | 2022

TRANSITIONING FROM ONLINE TO BLENDED LEARNING MODALITY: A STUDY ON STUDENTS' PHYSICAL AND MENTAL READINESS

Jolai R. Garcia-Bolaños[i],
Gerry Balajediong Jr.,
Gwynnie Lynch Tarongoy,
Schenly Joyce Mayola,
Amera Aida Kamaong,
Rejeane Mae Cajutol,
Arian Dave Pantino,
David Ryan Go Biao,
Ellen Rose Reyes
Notre Dame of Midsayap College,
Philippines

Abstract:
This study sought to determine the readiness of the Grade 11 STEM students in terms of physical and mental aspects in transitioning from online to blended learning modality. A quantitative approach, particularly a descriptive-correlational design was utilized in this study with 130 respondents. Results revealed that the senior high school students are ready in both physical and mental aspects in transitioning from online to blended learning modality. Moreover, it was found that there is a strong positive correlation between the physical and mental readiness of the students. It is therefore recommended that the students should learn how to properly manage their time to avoid cramming and stress and that the teachers should also be given more trainings to cater to the various needs of the learners in the blended learning modality.

Keywords: online learning, blended learning, readiness, physical and mental aspects

1. Introduction

COVID-19 is still a threat to the world's civilization. It is primarily a health disaster, but it has also resulted in unparalleled educational, political, economic, and environmental chaos, all of which have transformed people's lifestyles (Toquero, 2021). The unexpected COVID-19 pandemic has closed schools and shifted the mode of education to digital and

[i] Correspondence: email jolaigarcia30@gmail.com

distance learning methods. Schools and institutions of higher education (HEIs) were shut in 185 nations, affecting 1.6 billion students, or 89.4 % of the students enrolled (UNESCO, 2020). It is a worldwide issue that has an impact on the delivery of high-quality education. In Asia, higher education institutions have followed in the footsteps of their western counterparts in implementing blended learning. This move is based on the idea that integrating various online technologies and instructional methodologies into the classroom will allow students to have more time flexibility and better their learning outcomes. Universities are able to provide more types of merging online learning and face-to-face learning courses thanks to the convergence of information and communication technology, resulting in better learning outcomes (Tham, 2011).

Generally, in the Philippines, the Centre for Blended Learning was established in which parents and students responded well. Furthermore, blended learning (BL) is used in topics such as English, specifically in Language, Science, and Distance Education. The application of BL in education encourages students to engage positively in all activities, improve their learning behavior, and empower them to become leaders, coaches, and mentors to their peers (Tupas, 2020).

Blended learning is not new to the Philippine education system since many colleges and universities around the country have already adopted these concepts a long time ago. But DepEd suggested that during this pandemic, traditional approaches shifted into blended learning (Esquerra, 2020). Moreover, Anoba (2020) suggested that success also depends on the readiness of the teachers because they are vital in implementing blended learning. As a result, many studies about teachers' readiness have already been made. However, there is no specific study that gives emphasis on the physical and mental readiness of students in online to blended learning.

At Notre Dame of Midsayap College, the Senior High School Department adapted two modes of online learning: namely Asynchronous, which allows students to learn at their own pace and within a particular timeframe and Synchronous, which requires real-time live online classes. However, due to the easing of COVID-19 restrictions, the school will be shifting to a blended learning modality by the academic year 2022-2023. Hence, this study will serve as a guide in assessing how ready the students are for the online learning to blended learning modality transition. Moreover, this study is critical because it will provide information that will be helpful to the institution in crafting policies relating to the implementation of blended learning.

2. Statements of the Problem

The researchers aimed to determine the readiness and the adaptability of online blended learning of Grade 11 STEM Students of Notre Dame of Midsayap College. The researchers sought to answer the following questions:

1) What is the demographic profile of the respondents in terms of:
a. age?

b. sex?

2) What is the level of readiness of the grade 11 students in transitioning from online to blended learning in terms of:
   a. physical?
   b. mental?
3) Is there a significant difference in the readiness of the respondents when grouped according to sex?
4) Is there a significant relationship between the respondents' physical and mental readiness?

4. Methods

This research was conducted on 130 Grade 11 STEM students in Notre Dame of Midsayap College through the fishbowl sampling method. A quantitative research approach particularly descriptive-correlational research design was employed in assessing the students for transitioning from online to blended learning. A descriptive research design can use a wide variety of research methods to investigate one or more variables. Unlike in experimental research, the researcher does not control or manipulate any of the variables, but only observes and measures them. Descriptive research aims to accurately and systematically describe a population, situation or phenomenon (McCombes, 2019). Moreover, correlational research is to describe the relationship among variables rather than inferring cause and effect relationships. Descriptive correlational studies are useful for describing how one phenomenon is related to another in situations where the researcher has no control over the independent variables, the variables that are believed to cause or influence the dependent variable or outcome variable (Lappe, 2000). The survey was given through Google Forms and was disseminated through the respondents' messenger accounts. They had given at least one day to respond to the questions. The survey questionnaire was composed of four parts. The first part was for the respondents' demographic profiles (sex and age). The second part was the level of readiness. The respondents rated on a scale ranging from not ready to ready, which corresponds to the given scale that was interpreted as: 5- very ready, 4- ready, 3- adequately ready, 2- somewhat ready, 1- not ready. The survey questionnaire was given to the respondents with proper instructions in order to generate an accurate and honest response. Moreover, the responses of the respondents were scored, recorded, and tabulated. Table 1, evaluated the demographic profile, including the age, sex, frequency counts, and percentage distribution was used to determine the profile data. Tables 2 and 3, determined the physical and mental readiness of grade 11 STEM students in Transitioning from Online to Blended Learning. The mean and standard deviation were also used to determine how much the data was spread out around the average. Table 4, determined whether there is a significant difference in the grade 11 STEM students' physical and mental readiness was determined using a T-test. In addition, Pearson r Correlation was used as the

statistical treatment to determine how strong the relationship between the two variables for table 5.

5. Results and Discussions

Presented below are the findings and discussions based on the data gathered. The presentation is organized into four parts namely the (1) demographic profile of the respondents, (2) readiness of the respondents in terms of physical and mental aspects, (3) difference of the respondents' readiness when grouped according to sex, and (4) relationship between mental and physical readiness of the respondents.

5.1 Demographic Profile of the Respondents

As shown in the table below, the minimum age is 15 years old, and the maximum age is 18 years old. The greatest number of respondents were aged 17 years old with a frequency of 67.7 percent and the least number of respondents were aging 15 years old with a frequency of 1.5 percent. Lastly, most of the respondents are female with a total of 62.3 percent compared to the male respondents that have a total of 37.7 percent.

Table 1: Demographic Profile of the Respondents

Profile of the Respondents	*f*	%
Sex		
Male	49	37.7
Female	81	62.3
Total	**130**	**100.0**
Age		
15	2	1.5
16	29	22.3
17	88	67.7
18	11	8.5
Total	**130**	**100.0**

5.2 Physical and Mental Readiness of the Students

Table 2 presents the level of readiness of the grade 11 students in transitioning from online to blended learning in terms of physical aspects. The result showed that the readiness in terms of physical aspect gained an average mean of 3.86 with a standard deviation of 0.82 and is interpreted as Ready.

Table 2: Physical Readiness of the Students

A. Physical	**Mean**	**SD**	**Description**
1. I am_____ to encounter the challenges of blended learning.	3.63	0.86	Ready
2. I am _____ to study independently with self-reliance in completing tasks.	3.78	0.77	Ready
3. I am _____ to have face-to-face and e-learning with enthusiasm.	3.55	1.12	Ready
4. I am _____ to manipulate modern technologies and devices for blended learning.	3.86	0.72	Ready
5. I am _____ to learn in more flexible and convenient manner.	4.00	0.72	Ready
6. I am _____ to participate in learning both inside and outside the classroom.	3.81	0.90	Ready
7. I am _____ to transform myself from passive to active learner.	3.91	0.85	Ready
8. I am _____ to gain more experiences in blended learning	4.06	0.73	Ready
9. I am _____ to be more focused on my studies.	4.10	0.75	Ready
10. I am _____to be inspired on the new modality which is the blended learning.	3.88	0.78	Ready
Average	**3.86**	**0.82**	**Ready**
Note: Valid N = 130			

Scale	**Range**	**Description**
1	1.00 – 1.80	Not Ready
2	1.81 – 2.60	Somewhat Ready
3	2.61 – 3.40	Adequately Ready
4	3.41 – 4.20	Ready
5	4.21 – 5.00	Very Ready

5.3 Physical Readiness

Findings revealed the top three questions with the highest mean were *"I am ___ to be more focused on my studies"*, *"I am __to gain more experiences in blended learning."* and *"I am ___to learn in a more flexible and convenient manner."* This shows that the respondents are ready to be more focused in education, especially in blended learning; it is supported by the statement of Valiathan (2002) that attitude-driven learning, combines various events and delivery media to develop specific behaviors. The survey also shows that respondents are ready to gain more experiences in blended learning; it is also supported by the statement of Kanuka (2004) that blended learning environments capitalize on the strengths of traditional classes, resulting in more effective meaningful learning experiences. In addition to that, respondents are ready to learn in a more flexible and convenient manner which is supported by the statement of Tang and Chaw (2013) that blended learning allows students to learn in a more flexible and convenient manner, both in terms of location and time.

Table 3 presents the readiness of the grade 11 students in transitioning from online to blended learning modality in terms of mental aspects. The results showed that the level of readiness of the respondents in terms of mental aspects got an average mean of 3.77 with a standard deviation of 0.85, interpreted as Ready.

Table 3: Mental Readiness of the Students

B. Mental	**Mean**	**SD**	**Description**
1. I am _____ to put all my efforts mentally for this learning modality.	3.90	0.83	Ready
2. I am _____to improve my cognitive adaptability for blended learning.	3.83	0.71	Ready
3. I am _____ to face stress and fatigues caused by blended learning.	3.40	1.04	Adequately Ready
4. I am _____ to experience bad and overloaded days.	3.36	1.05	Adequately Ready
5. I am _____ to put importance to my mental health as well as my study.	3.98	0.81	Ready
6. I am _____ to practice and enhance my mental function for an effective learning.	3.95	0.82	Ready
7. I am _____ to overcome knowledge difficulties for blended learning.	3.81	0.81	Ready
8. I am _____ to follow the learning and embrace the concept.	3.86	0.73	Ready
9. I am _____ to increase my bravery to accomplish and create something new.	3.88	0.75	Ready
10. I am _____ mentally to participate blended learning.	3.70	0.96	Ready
Average	**3.77**	**0.85**	**Ready**
Note: Valid N = 130			

Scale	**Range**	**Description**
1	1.00 – 1.80	Not Ready
2	1.81 – 2.60	Somewhat Ready
3	2.61 – 3.40	Adequately Ready
4	3.41 – 4.20	Ready
5	4.21 – 5.00	Very Ready

5.4 Mental Readiness

Based on the survey, the top three questions with the highest mean were *"I am ___to put importance to my mental health as well as my study." "I am __to practice and enhance my mental function for an effective learning."* and *"I am __to put all my efforts mentally for this learning modality."* The survey shows that the respondents are ready to put importance on their mental health and study for blended learning; it is supported by the statement of Tami Oliphant (2016) that when it comes to online learning, the ideal sense of community comes from combining face-to-face and online interactions setting. The second highest mean shows that students were ready to enhance their mental function for effective

learning; it was supported by the statement of Slavin (2006) that learning and embracing the notion, implying that the students or groups of students are performing at a higher level of mental function. The third highest mean also shows that respondents were ready to put all of their efforts into the blended learning modality; it was supported by the statement of Schunk (2005) that self-efficacy is thought to affect how students choose activities, put in effort, and persevere in completing a task.

5.5 Difference in the Respondents' Readiness when Grouped According to Sex

Table 4.3 presented the significant difference in the readiness of the respondents when grouped according to sex using the T-test. It showed that the computed p-value is 0.3850 which is lesser than the set value of 0.05. This indicated that the difference in the readiness of the respondents when grouped according to sex is not significant.

5.6 Respondents' Readiness when Grouped According to Sex

Table 4: Respondent's Readiness when Grouped According to Sex

Variables	**N**	**Mean**	**SD**	**p-value**	**Decision**
Male	49	3.87	0.51	**.3850**	**NS**
Female	81	3.78	0.64		
Total/Average	**130**	**3.82**	**0.57**		
NS = Not significant at .05 level (2 – tailed) S = Significant at .05 level (2– tailed)					

5.7 Relationship of Physical and Mental Readiness of the Respondents

Table 5 shows that the Pearson correlation is 0.817 and the significant value is 0.000 which is lower than the set significance of 0.01.

Table 5: Relationship of Physical and Mental Readiness of the Respondents

Correlations				
		Physical	**Mental**	**Decision**
Physical	Pearson Correlation	1	.817**	
	Sig. (2-tailed)		.000	**Significant**
	N	130	130	
Mental	Pearson Correlation	.817**	1	
	Sig. (2-tailed)	.000		
	N	130	130	
**. Correlation is significant at the 0.01 level (2-tailed).				
NS = Not significant at .01 level S = Significant at .01 level				

Table 5 shows the Pearson-r correlation with the value of 0.817 which indicates that there is a strong positive correlation between the mental and physical readiness of the respondents. Moreover, the p-value is 0.000, which signifies there is a significant relationship between the variables- enough proof for the null hypothesis to be rejected.

The result implies that the readiness of students in terms of mental and physical will help the students to be prepared for blended learning. Siqueira (2020) also found a link between mental skills and physical skills in active approaches like blended learning, which can encourage students and help them build metacognitive skills.

6. Conclusion

In the light of the findings of the study, the following conclusions were drawn: Senior high school students, regardless of their sex, are now physically and mentally ready to transition from the online to blended learning modality. Moreover, the physical aspect of readiness is as important as the mental aspect since they have a strong link in enhancing a student's metacognitive skills in a blended learning modality.

6.1 Recommendations

In light of the findings and conclusions, the following recommendations are made:

1) The students should practice time management to avoid cramming and stress.
2) The administration should make sure that the classrooms are ready for the blended learning modality and ensure that minimum health protocols be implemented.
3) The guidance office should provide webinars or programs for the students to be able to deal with stress and fatigue as a result of the adjustment of transitioning from online to blended learning.
4) Additional training should be given to the teachers to be well-prepared for the transition of the learning modality.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Authors

Jolai R. Garcia-Bolaños is a full-time faculty member in the College of Arts and Sciences at Notre Dame of Midsayap College, Philippines. orcid.org/0000-0002-4750-5562.
Gerry Balajediong Jr., Gwynnie Lynch Tarongoy, Schenly Joyce Mayola, Amera Aida Kamaong, Rejeane Mae Cajutol, Arian Dave Pantino, David Ryan Go Biao, Ellen Rose Reyes are student researchers at Notre Dame of Midsayap College, Philippines.

References

Alammary, A. (2019). Blended learning models for introductory programming courses: A systematic review. Plos One. Retrieved from:

https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0221765#pone.0221765.ref054

Anoba, Jeorge Louie & Cahapay, Michael (2020). The Readiness of Teachers on Blended Learning Transition for Post-COVID-19 Period: An Assessment Using Parallel Mixed Method. 4. 295-316. 10.20319/pijtel.2020.42.295316.

Bessa, C., Hastie, P., Rosado, A., & Mesquita, I. (2021). Sport Education and Traditional Teaching: Influence on Students' Empowerment and Self-Confidence in High School Physical Education Classes. https://www.mdpi.com/2071-1050/13/2/578/htm#B40-sustainability-13-00578.

Beytekin, O. (2021, August). Transformation of Higher Education into New Normal. https://www.researchgate.net/publication/353918690_Transformation_of_Higher Education_into_New_Normal

Dar, F. R. (2016). Teaching through the blended mode of learning: Benefits, Issues and challenges. The Eurasia Proceedings of Educational and Social Sciences, 4, 84-92. http://www.epess.net/en/pub/issue/30322/332894

Fein, S. (2019, August 05). Blended Learning: What Does the Research Show? https://blogs.oregonstate.edu/inspire/2019/08/05/blended-learning-what-does-the-research-show/

Gecer, A. & Dag, F. (2012). A Blended Learning Experience. https://eric.ed.gov/?id=EJ978452

Gedik, N., Kiraz, E., & Ozden, Y. (2012, July). The Optimum Blend: Affordances and Challenges of Blended Learning for Students. Google Scholar. Retrieved from: https://files.eric.ed.gov/fulltext/ED537840.pdf

Hamzah, F., Phong, S., Sharifudin, M., Zain, Z., Rahim, M. (2021). Exploring Students' Readiness on English Language Blended Learning. https://files.eric.ed.gov/fulltext/EJ1288024.pdf

Kaur, M. (2013, October). Blended Learning - Its Challenges and Future. https://www.sciencedirect.com/science/article/pii/S187704281303351X

Khedher, A., Jraidi & I., Frasson, C. (2019, January 18). Tracking Students' Mental Engagement Using EEG Signals during an Interaction with a Virtual Learning Environment. Scientific Research. Retrieved from: https://www.scirp.org/html/1-9601410_89991.htm#ref24

Khodaei, S., Hasanvand, S., Gholami, M., Mokhayeri, Y., Amini, M. (2022, January 19). The effect of the online flipped classroom on self-directed learning readiness and metacognitive awareness in nursing students during the COVID-19 pandemic. https://link.springer.com/article /10.1186/s12912-022-00804-6

Lindgren, K., Peterson, K., DiBello, A., & Neighbors, C. (2021, January). Theory-driven interventions: How social cognition can help. https://www.researchgate.net/publication/348906708_Theory-driven_interventions_How_social_cognition_can_help

Marinoni, G., van't Land, H., & Jensen, T. (2020, May). The impact of COVID-19 on higher education around the world IAU global survey report. https://www.iauaiu.net/IMG/pdf/iau_covid19_and_he_survey_ report_final_may_202 0.pdf

Meng-Chun Chin, J., & Ching, G. (January, 2022). Perspectives on the Barriers to and Needs of Teachers' Professional Development in the Philippines during COVID-19. https://www.mdpi.com/20711050/14/1/470/html

Oliver, M., & Trigwell, K. (2005). Can 'Blended Learning' Be Redeemed? Sage Journals. https://journals.sagepub.com/doi/abs/10.2304/elea.2005.2.1.17

Raff-Ganachevsky, & A., Tvardovskaya, A. (2021). Psychological readiness of students for distance learning, Arpha Proceedings. https://www.google.com/url?sa=D&q=https://ap.pensoft.net/article/24385/download/pdf/%3Ffbclid%3DIwAR1wjMRmuYepZYiPk930KnEvbH9D25aIb9kryQMiXVNPq7YvrAUhofRPqM&ust=1647441180000000&usg=AOvVaw3GTJ8qoW3ou8afkd3r4hzs&hl=en&source=gmail

Sajith, P. & Shantakumari, N. (2015). Blended Learning: The Student Viewpoint. https://www.ncbi.nlm.nih.gov/pmc/articles/P MC4594344/

Sugiharto, B., & Corebima, D. (2019 February). The Pre-Service Biology Teacher Readiness in Blended Collaborative Problem Based Learning. https://eric.ed.gov/?id=EJ1230042

Tang, C. & Chaw L. (2013, December 30). Readiness for blended learning: understanding attitude of university students. https://www.learntechlib.org/p/209223/

Tarkar, P. (2020, May). Impact of Covid-19 Pandemic on Education System https://www.researchgate.net/profile/Preeti-Tarkar/publication/352647439_Impact_Of_Covid19_Pandemic_On_Education_System/links/60d1e909299bf19b8d99d279/Impact-Of-Covid-19-Pandemic-On-Education-System.pdf

Tupas, F., & Linas-Laguda, M. (2020). Blended Learning – An Approach in Philippine Basic Education Curriculum in New Normal: A Review of Current Literature. Universal Journal of Educational Research 8(11): 5505-5512, 2020. DOI: 10.13189/ujer.2020.081154

Vaughan, N. (2007). Perspectives on Blended Learning in Higher Education Retrieved from:https://www.learntechlib.org/primary/p/6310/#:~:text=Students%20indicate%20that%20a%20blended,learning%2C%20and%20using%20sophisticated%20technologies.

Western Governors University (2020, May 30). Five Educational Learning Theories. Retrieved from: https://www.wgu.edu/blog/five-educational-learning-theories2005.html#close

White, S., & Killam, W. (2017). Applying theory to practice on the diverse campus. https://books.google.com.ph/books?hl=en&lr=&id=zpbvDQAAQBAJ&oi=fnd&pg=PA23&dq=transition+theory+schlossberg&ots=QOPbDF4Q6z&sig=LL903OJ3frJ

n7QneC7jUjU8dWJQ&redir_esc=y#v=onepage&q=transition%20theory%20schlossberg&f=false

Yang, B. & Goh, T. (2021). The role of e engagement and flow on the continuance with a learning management system in a blended learning environment. https://link.springer.com/content/pdf/10.1186/s41 239-021-00285-8.pdf

Yulia, H. (2017, March 30). Readiness for Blended Learning viewed from the Students Attitude towards Learning Aspects. https://www.learntechlib.org/p/208706/

Zumor, A. & Wahed, A. (2013). EFL Students' Perceptions of a Blended Learning Environment: Advantages, Limitations and Suggestions for Improvement. Google Scholar. Retrieved from: https://eric.ed.gov/?id=EJ1077093.