

Modular Distance Learning in Teaching Sports to the Students' Performance of Cavinti Integrated National High School

Jorgelie Flores Arjona*

jorgelie.arjona@deped.gov.ph
Department of Education
Pagsanjan, Laguna 4008 Philippines

Abstract

Physical activity, such as participating in sports on a regular basis, can improve overall health and fitness while also lessening the risk of a variety of medical illnesses. Sports are physical activities that necessitate a set of rules in order to learn and excel in them. Distance education, on the other hand, is frequently utilized nowadays. It is capable of providing universal education and equipping students from all walks of life with new and qualified ideas and knowledge. Educators and students are trying to keep up with the frequent changes in the current situation. It has a significant impact not just on teachers' productivity, but also on students' social lives and learning.

This research was conducted by the author in order to determine the level of Modular Distance Learning in teaching sports to the students' interest, willingness, type of sports, duration and appropriateness and the level of students' performance with regards to their Third Grading Period. The study also dealt with knowing the profile of the students with respect to their age, sex and gender. This study used a descriptive research method. A total of 54 (fifty-four) Grade 8 students from Cavinti Integrated National High School were chosen as student - respondents using a purposive sampling technique. Data collected was through a self-made questionnaire employed as a research tool. The main study instrument used a Likert scale survey questionnaire. The data collected with this instrument was examined and interpreted using statistical tool.

The results showed that the respondents are using the Self-Learning Module for a reason that: it is interesting to read, they enjoy reading at their own pace, the Self-Learning Module help them know more about the sport wanted, and were given flexible time to answer, it provides activity suited for the respondents.

Self-Learning Module is used by the Grade 8 students of Cavinti Integrated National High School in studying sports in the subject of Physical Education. It contains sports concepts and activities that is aligned to the Most Essential Learning Competency.

The use of Modular Distance Learning Modality helps the students in the learning process as it can be seen in their academic performance through their grades in Third Grading Period. About 40.74% of the total population gained grades of 85 to 89, then it was followed by the students who had grades of 90 to 100 which is 31.48% of the total population.

Keywords: Modular; Distance Learning

Introduction

“Education is the power to think clearly, the power to act well in the world’s work, and the power to appreciate life.” Brigham Young

During the late 2019, the spread of virus known as coronavirus (COVID-19) has brought the whole world to a huge change. The pandemic that hit the globe has posed great challenges to all industries,

especially education. To the great extent, this pandemic has brought another concept of new normal that affect the global situation in terms of the economy and education. In fact, the impact of COVID-19 on educational administration took our leaders into forced emergency measures from the different government sectors particularly the Department of Education. However, it didn't hinder to go on with the implementation of the curriculum in education sectors side by side with the precautionary health measures and instructional alternatives. These includes the platforms to use instead of face-to-face mode of learning.

Apparently, one of these is the Modular Distance Learning which is individualized education that allows students to use self-learning modules (SLMs) in print or digital format/electronic copy, depending on the learner's needs and other resources. (Wix.com, 2020)

Distance education has lately gone online, and other modalities such as modular delivery have expanded to incorporate a vast array of systems and methods on virtually any connected device. Students can learn their subjects through various alternative delivery modalities with the help of their parents and teachers instead of attending face-to-face classes. Students learn using printed or digitized modules, online education, or television or radio-based instruction in remote learning. Even though students are learning at home, health and physical educators to provide guidance and activities to assist students fulfill the national recommendation of 60 minutes or more of moderate-to-vigorous physical exercise per day for children and adolescents ages 6 to 17. That the teachers and students struggle to create and sustain personal ties and connections while using the Modular Distance Learning (MDL) option.

In the situation like physical activity, such as frequent involvement in sports, it can enhance general health and fitness while also lowering the risk of numerous chronic illnesses. Sports involve physical activity that requires a set of rules to acquire and excel in certain sports.

To address the needs now that everyone faces the crisis on health issues, many shifted to the so-called Distance Education which provides mass-education for everyone to equip students from all backgrounds with innovative and qualified thoughts and knowledge.

However, in the governments, schools, teachers, have been struggling to shift from face-to-face learning to distance learning. This is most likely due to changes in school schedules, balancing work, and family obligations, and attempting to figure out how to teach in a distant learning environment. The Philippines is currently adapting to the new typical type of education, and continues to do so. The Department of Education developed Modular Distance Learning to ensure educational continuity and for each school to continue to fulfill its objective and vision of providing quality education to every Filipino learner.

As we all believe no matter how tough the situation is, Education will continue with everyone's concerted effort to bring out the best for the fulfillment of the common goal.

As quoted," Education is the power to think clearly, the power to act well in the world's work, and the power to appreciate life" that each one has the responsibility to take.

Background of the Study

Change is constant and in our modern world where distance learning is widely known and the pandemic is reshaping the education, teachers necessitate to be familiar with the modular distance learning in teaching Physical Education. It is said that Physical Education, like sports, contributes to "children's development, later lives and to society are multiple and diverse" (Penney & Chandler, 2000, p. 74). Prior study has looked at the several ways that Physical Education may affect learners. (e.g, Shephard, 1997; Morgan & Hansen, 2008; Mahar, et al., 2006; Benedict, 2010). Research in the field of Physical Education has focused at various topics, including the impact of physical education on academic performance. (Shephard, 1997).

As stated by Dangle, Y.R., & Sumaoang, J. D., (2020) Modular learning is the most popular type of Distance Learning. In the Philippines, this learning modality is currently used by all public schools because according to a survey conducted by the Department of Education (DepEd), learning through printed and digital modules emerged as the most preferred distance learning method of parents with children who are

enrolled this academic year (Bernardo, J). This is also in consideration of the learners in rural areas where internet is not accessible for online learning. The teacher takes the responsibility of monitoring the progress of the learners. The learners may ask assistance from the teacher via e-mail, telephone, text message/instant messaging among others. Where possible, the teacher shall do home visits to learners needing remediation or assistance (Llego, n.d.). Printed modules will be distributed to children, parents, and guardians by teachers or local government officials.

Modular learning instructs students to learn values, not repetitive lessons. There are topics that are not included in the modules, yet the students are taught, to be aware of the pandemic. Making a conscious effort, time management, discipline, and experimenting are these values. Teachers also use it to strengthen their bonds with their parents. Patience is also visible in the process (Helpline PH, 2020). Because they are open-minded, more students benefit from the modules. They are people that are open to change and adaptable in their approach to their learning. The entire pandemic is a test for students to remember what they learned in the modules.

As mentioned in (SHAPE America, 2020) School districts and schools must create equitable distance learning opportunities for all students, including those students without access to the internet, mobile devices, or other equipment.

When developing curricular units, school evaluations, and learning activities, health and physical educators should meet their district or school's remote learning requirements. In a distant learning setting, teachers must make a more determined effort to connect. Students must feel that they are a valued member of their school community in order to learn. The school/district needs to facilitate online learning to reach out students due to restrictions, likewise teachers have to develop methods to connect with them.

The teacher as part of the school curriculum can help improve the teaching and learning process of teaching sports in Physical Education using modular distance learning in the current situation. This will have a beneficial impact on the lives of many students, not just in terms of their health, but also in other ways that this research will uncover.

These shed light to the researcher to conduct the study on the perceived effectivity of Modular Distance Learning on teaching sports on both students and teachers as well and its effect on student's learning.

Theoretical Framework

These following theories were searched and used making it suitable to support the perceived effectiveness of Module posed in this study.

In recent years, there has been a transition from teacher-led curriculum to student-centered curriculum. changed the emphasis to knowledge, skills, and abilities students' competencies upon completion of a course or an application. The focus of modular learning is on learning outcomes, and its effectiveness is dependent on connecting results to student learning and course design.

According to Gillin, H. (2020) School-based physical activity opportunities are a critical method of engagement to help children achieve the recommended 60 minutes of physical activity each day. With our nation at a standstill and our population quarantined, students are staying home instead of attending school. This means they are not experiencing physical education class.

The combination of school closures and work-from-home mandates has the potential to increase children's sedentary time. Students physically move throughout the day at school, shifting between classes and activities.

In addition, as said by Tate et al., (2014) one well known theory as it applied to the focus of modular learning is on learning outcomes, and its effectiveness is dependent on connecting objectives to student learning and course design. To be successful in their implementation, modules require dedication, time, and a systematic approach that includes a justification for the module, proper design and development, and an assessment procedure.

Instructional leaders should focus on learners' individual needs, provide higher level of interactions with them,

and shift as much responsibility to them as needed.

The usual experiential activity starts with some form of challenge.

A one- or one-and-a-half-hour primarily experiential experience follows the theoretical lecture. The advantages of integrating modules are particularly significant in training and consulting in "real-world" scenarios. It is essential in these circumstances to make presentations of complexity to focus on skill development and learning for the unique individual.

The modular distance learning allows students to analyze the topics on their own and it can be considered as Experiential Learning. A theory cited by A.Y. Kolb & D.A. Kolb (2017) Experiential lessons provide students a hands-on experience with concepts, allowing them to get a deeper, more meaningful grasp of course concepts and how they work in the real world. They enhance the course content's affective quality. This happens when students are evaluating, analyzing, thinking, and reflecting on their personal reactions, as well as when they are solving issues as part of the activities. Insofar as the knowledge is preserved in memory formation, it can greatly increase learners' concept memory. Experiential teachings have the power to mold students' perspectives of learning and of themselves. They can result in significant intrapersonal discoveries, such as a better understanding of one's own personal views.

The power of experiential learning, according to educators, is in the unique relationship that is formed between the teacher, the student, and the subject matter being studied. All participants gain knowledge through concrete experience of the subject matter, modify it through reflection and conceptualization, and then transform it again by acting to change the world, including what information is attended to in the new experience, according to the learning cycle. In this study, it is perceived by the researcher that the Gillin H. theory and the Experiential Learning theory of A.Y. Kolb & D.A. Kolb

Statement of the Problem

This study was conducted to determine Students' Profile and the Modular Distance Learning in teaching sports to the Students' Performance in Cavinti Integrated National High School. Specifically, this study sought to answer the following questions:

1. What is the profile of the respondents relative to
 - 1.1 Age;
 - 1.2 Sex
 - 1.3 Gender?
2. What is the level of Modular Distance Learning in Teaching Sports with regards to:
 - 2.1 Interest
 - 2.2 Willingness
 - 2.3 Type of Sports
 - 2.4 Duration
 - 2.5 Appropriateness
3. What is the level of students' performance in terms of Grade in Third Grading Period?
4. Are there significant relationship between the students' profile and the students' performance of Cavinti Integrated National High School?
5. Do Modular Distance Learning in teaching sports have a significant relationship to the student's performance of Cavinti Integrated National High School?

Research Methodology

This chapter presents the research design used, respondents of the study, sampling technique, research procedure, research instrument as well as the statistical treatment employed in the study.

A descriptive method is used in the gathering of information. This method is suitable whenever the

objects in a class differ from one another and one wants to discover to what extent different conditions exist among these objects.

Descriptive study is a form of study that focuses on describing current circumstances and relationships, as well as clear outcomes, held beliefs, and emerging trends. It is preoccupied with the present, but it does not ignore the past's events and impacts in connection to the present. Descriptive analysis is a type of data analysis that summarizes information about participants by using a variety of data analysis techniques.

Descriptive statistics were utilized to answer research questions, test hypothesis, and respond to queries about the present status of the study's subject.

This study involved fifty-four (54) Grade 8 Junior High School students from Cavinti Integrated National High School.

Results and Discussion

Table 1. Level of Modular Distance Learning in Teaching Sports with regards to Interest

Statement	MEAN	SD	REMARKS
I am using the Self-learning module <i>because...</i>			
1. I am having fun answering the Self-learning module.	3.87	0.65	Agree
2. I find the pictures and illustrations appealing.	3.96	0.61	Agree
3. My attention is piqued by the text presentation.	3.89	0.66	Agree
4. It is interesting to read.	4.19	0.62	Agree
5. It is accessible.	4.18	0.52	Agree
Overall Mean	4.02	0.62	High

Table 1 illustrates the level of Modular Distance Learning in Teaching Sports with regards to Interest. Among the statements above, “I am using the Self-learning module because it is interesting to read” yielded the highest mean score (M=4.19, SD=0.62) and was remarked as Agree. This is followed by “I am using the Self-learning module because it is accessible” with a mean score (M=4.18, SD=0.52) and was also remarked as Agree.

On the other hand, the statement “I am using the Self-learning module because I am having fun answering the Self-learning module” received the lowest mean score of responses with (M=3.87, SD=0.65) and was remarked Agree.

Overall, the level of Modular Distance Learning in Teaching Sports with regards to Interest attained a mean score of 4.02 and a standard deviation of 0.62 and was High.

Table 2. Level of Modular Distance Learning in Teaching Sports with regards to Willingness

Statement	MEAN	SD	REMARKS
I am using the Self-learning module <i>because...</i>			
1. I have the will to study using Self-learning modules	4.06	0.71	Agree
2. I feel motivated to learn a specific sport.	3.83	0.84	Agree
3. I feel comfortable following instructions about sports.	3.93	0.70	Agree
4. I enjoy reading at my own pace.	4.17	0.61	Agree
5. I am happy to look back and review the contents related to sports.	3.98	0.63	Agree

Overall Mean	3.99	0.71	High
---------------------	-------------	-------------	-------------

Table 2 presents the level of Modular Distance Learning in Teaching Sports with regards to Willingness. Among the statements above, “I am using the Self-learning module because I enjoy reading at my own pace” yielded the highest mean score (M=4.17, SD=0.61) and was remarked as Agree. This is followed by “I am using the Self-learning module because I have the will to study using Self-learning modules” with a mean score (M=4.06, SD=0.71) and was also remarked as Agree. On the other hand, the statement “I am using the Self-learning module because I feel motivated to learn a specific sport” received the lowest mean score of responses with (M=3.83, SD=0.84) and was remarked Agree.

The level of Modular Distance Learning in Teaching Sports with regards to Willingness attained a mean score of 3.99 and a standard deviation of 0.71 and was High.

Table 3. Level of Modular Distance Learning in Teaching Sports with regards to Type of Sports

Statement	MEAN	SD	REMARKS
I am using the Self-learning module <i>because...</i>			
1. I learned a lot about different sports when reading SLMs.	3.89	0.60	Agree
2. I picked a sport that I like while using SLMs	3.74	0.65	Agree
3. I learned how to perform a specific sport while reading SLMs.	3.91	0.56	Agree
4. I performed well while following the instructions I read/studied.	3.92	0.59	Agree
5. SLMs helped me know more about the sport I want.	3.93	0.64	Agree
Overall Mean	3.87	0.61	High

Table 3 presents the level of Modular Distance Learning in Teaching Sports with regards to Type of Sports. Among the statements above, “I am using the Self-learning module because SLMs helped me know more about the sport I want” yielded the highest mean score of (M=3.93, SD=0.64) and was remarked as Agree. This is followed by “I am using the Self-learning module because I performed well while following the instructions I read/studied” with a mean score (M=3.92, SD=0.59) and was also remarked as Agree. On the other hand, the statement “I am using the Self-learning module because I picked a sport that I like while using SLMs” received the lowest mean score of responses with (M=3.74, SD=0.65) and was remarked Agree.

The level of Modular Distance Learning in Teaching Sports with regards to Type of Sports attained a mean score of 3.87 and a standard deviation of 0.61 and was High.

Table 4. Level of Modular Distance Learning in Teaching Sports with regards to Duration

Statement	MEAN	SD	REMARKS
I am using the Self-learning module <i>because...</i>			
1. I spend time using SLMs more than the time required.	3.70	0.60	Agree
2. I study using the SLMs every day.	3.69	0.72	Agree
3. I was given flexible time to answer the SLMs.	3.98	0.63	Agree
4. I was able to finish the given task on time.	3.80	0.63	Agree
5. The time allotment for each activity is exact.	3.65	0.68	Agree
Overall Mean	3.76	0.66	High

Table 4 presents the level of Modular Distance Learning in Teaching Sports with regards to Duration. Among the statements above, “I am using the Self-learning module because I was given flexible time to answer the SLMs” yielded the highest mean score ($M=3.98$, $SD=0.63$) and was remarked as Agree. This is followed by “I am using the Self-learning module because I was able to finish the given task on time” with a mean score ($M=3.80$, $SD=0.63$) and was also remarked as Agree. Meanwhile, the statement “I am using the Self-learning module because the time allotment for each activity is exact” received the lowest mean score of responses with ($M=3.65$, $SD=0.68$) and was remarked Agree.

Generally, the level of Modular Distance Learning in Teaching Sports with regards to Duration attained a mean score of 3.76 and a standard deviation of 0.66 and was High.

Table 5. Level of Modular Distance Learning in Teaching Sports with regards to Appropriateness

Statement	MEAN	SD	REMARKS
I am using the Self-learning module <i>because...</i>			
1. The SLMs provides activities suited to the students' diversity	3.91	0.45	Agree
2. It takes into consideration the varying attitudes and capabilities of learners.	3.98	0.63	Agree
3. It includes exercises that assess the level of knowledge of the target learners.	4.06	0.45	Agree
4. Presents lessons which are based on individual personality and learning style	4.00	0.51	Agree
5. It provides activities suited to the learners.	4.11	0.46	Agree
Overall Mean	4.01	0.51	High

Table 5 presents the level of Modular Distance Learning in Teaching Sports with regards to Appropriateness. Among the statements above, “I am using the Self-learning module because it provides activities suited to the learners” yielded the highest mean score ($M=4.11$, $SD=0.46$) and was remarked as Agree. This is followed by “I am using the Self-learning module because it includes exercises that assess the level of knowledge of the target learners” with mean score ($M=4.06$, $SD=0.45$) and was also remarked as Agree. While, the statement “I am using the Self-learning module because the SLMs provides activities suited to the students' diversity” received the lowest mean score of responses with ($M=3.91$, $SD=0.45$) and was remarked Agree.

Overall, the level of Modular Distance Learning in Teaching Sports with regards to Appropriateness attained a mean score of 4.01 and a standard deviation of 0.51 and was High.

Table 6. Level of students' performance in terms of Grade in Third Grading Period

RANGE	GRADES IN PE		REMARKS
	FREQUENCY	PERCENTAGE	
90-100	17	31.48	Outstanding
85-89	22	40.74	Very Satisfactory
80-84	15	27.78	Satisfactory
75-79	0	0.00	Fairly Satisfactory
Below 75	0	0.00	Did Not Meet Expectations
Total	54	100.00	
Overall Mean	87.04	Very Satisfactory	
Standard Deviation	3.25		

Table 6 presents the level of students' performance in terms of Grade in Third Grading Period. Out

of fifty-four (54) students, twenty-two (22) or 40.74% of the total population gained grades of 85 to 89 which was very satisfactory. This was followed in frequency by those who had grades of 90 to 100 which seventeen (17) students or 31.48% of the population was identified to be outstanding. On the other hand, fifteen (15) respondents gained a grade between 80 to 84 which was satisfactory.

Based on the result above, the level of students' performance in terms of Grade in Third Grading Period has a mean score of 87.04 and a standard deviation of 3.25 and was remarked as very satisfactory. Although according to Dargo and Dimas (2021) In 2021, the study found that learners' GWA decreased by 2.25% after Modular Distance Learning was implemented, indicating a significant impact in their academic performance.

Table 7. Significant relationship between the students' profile and the students' performance of Cavinti Integrated National High School.

students' profile	students' performance	Computed r-value	Strength	p-value	Analysis
Age		0.401	Moderate	0.003	Significant
Sex	Grade	0.201	Weak	0.115	Not Significant
Gender		0.153	Weak	0.268	Not Significant

Legend:

Range	Verbal Interpretation
0.80-1.00	Very Strong
0.60-0.79	Strong
0.40-0.59	Moderate
0.20-0.39	Weak
0.00-0.19	Very Weak

Table 7 presents the significant relationship between the students' profile and the students' performance of Cavinti Integrated National High School. Specifically, it shows the relationship between students' profile and students' performance in terms of grade. Students' profile was observed to have no significant relationship with students' performance in terms of grade. This is evidenced by computed p-values which are more than the significance alpha.

Table 8. Significant relationship between the Modular Distance Learning in teaching sports and the students' performance of Cavinti Integrated National High School.

Modular Distance Learning	students' performance	Computed r-value	Strength	p-value	Analysis
Interest		0.188	Very weak	0.174	Not Significant
Willingness		0.141	Very weak	0.308	Not Significant
Type of Sports	Grade	0.026	Very weak	0.851	Not Significant
Duration		0.107	Very weak	0.443	Not Significant
Appropriateness		0.020	Very weak	0.884	Not Significant

Legend:

Range	Verbal Interpretation
0.80-1.00	Very Strong
0.60-0.79	Strong
0.40-0.59	Moderate
0.20-0.39	Weak
0.00-0.19	Very Weak

Table 8 presents the significant relationship between the Modular Distance Learning in teaching sports and the students' performance of Cavinti Integrated National High School. Specifically, it shows the relationship between Modular Distance Learning in teaching sports and students' performance in terms of grade. Modular Distance Learning in teaching sports was observed to have no significant relationship with students' performance in terms of grade. This is evidenced by computed p-values which are more than the significance alpha.

Summary of Findings

The findings revealed that the modular distance learning in teaching sports interpreted as high in terms of its components such as; interest with a mean of 4.02 and standard deviation of 0.62, willingness with a mean of 3.99 and standard deviation of 0.71, type of sports with a mean of 3.87 and standard deviation of 0.61, duration with a mean of 3.76 and standard deviation of 0.66, and appropriateness with a mean of 4.01 and standard deviation of 0.51.

Based on the performances of the respondents in terms of Grade in Third Grading Period, the findings show that it was interpreted as Very Satisfactory with a mean of 87.04 and standard deviation of 3.25.

The findings indicated that there is no significant relationship between the students' profile and the students' performance in terms of grade. The findings also show that the relationship between the modular distance learning in teaching sports was observed to have no significant relationship with students' performance in terms of grade.

Conclusions

The following is a list of the research's conclusions based on the stated findings.

1. There is no correlation between the profile of the Grade 8 students of Cavinti Integrated National High School and their academic achievement.
2. Modular Distance Learning in teaching sports had no significant relationship with Cavinti Integrated National High School students' performance.
3. The use of Self-Learning Module in a Modular Distance Learning Modality shows a positive impact on the students' performance in terms of grade.

Recommendations

The aforementioned findings and conclusions provide information that college students, college administrators, and future researchers can use or act upon. Hence, the research author suggests the following:

1. The teachers may have a program that may help the students utilize the use of Self-Learning Module in a Modular Distance Learning Modality.
2. The Department of Education through the School Division of Laguna may provide a different trainings and workshop in relation to conceptualizing the content of Self-Learning Modules.
3. Future education researchers may do a parallel study about the level of Modular Distance Learning in teaching sports to the students' performance in order to obtain more reliable results. As moderating variables, include age, sex, gender, year level, and athletic activity. Examine how these variables influence the relationship between modular distance learning and students' academic performance. Examine the instrument's reliability and to acquire more trustworthy and strong results, future researchers may increase the sample size of the respondents.

References:

- Alcala, M. & Castroverde, F. (2021). Modular distance learning modality: Challenges of teachers teaching amid the Covid-19 pandemic. *International Journal of Research Studies in Education* 10(8). DOI:10.5861/ijrse.2021.602
- Amir, L.R., Tanti, I. & Maharani, D.A. (2020). Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia. *BMC Med Educ* 20, 392. <https://doi.org/10.1186/s12909-020-02312-0>
- Anzaldo, G. (2021). Modular Distance Learning in the New Normal Education Amidst Covid-19. *International Journal of Scientific Advances*, 2(3). DOI:10.51542/ijscia.v2i3.6
- Askarova, A. G., Fyodorov, A. I., Kostin, D. N., Федоров, А. И., Аскарова, А. Г. & Костин, Д. Н. (2013). Distance learning technologies in system of preparation of specialists in physical culture and sports. <http://hdl.handle.net/10995/26647>
- Beltekin, E. & Kuyulu, I. (2020). The Effect of Coronavirus (Covid19) Outbreak on Education Systems: Evaluation of Distance Learning System in Turkey. *Journal of Education and Learning*; Vol. 9, No. 4; 2020 <https://doi.org/10.5539/jel.v9n4p1>
- Borukova, M. & Kuleva, M. (2019). Analysis of the Opinion of the Students from the National Sports Academy about the Distance Learning in Basketball in the Conditions of COVID-19 Pandemic. *Pedagogy*, 92(7), 291-301.
- Bullé, S. (2020). Extracurricular in Times of Pandemic: What about Arts and Sports? *Institute for the Future of Education: Observatory*. <https://observatory.tec.mx/edu-news/sports-arts-covid-19>
- Burns, M. (2011). Distance Education for Teacher Training: Modes, Models, and Methods. http://library.uog.edu.gy/eBooks/Distance_Education_for_Teacher_Training_by_Mary_Burns_EDC.pdf
- Cassidy, D., and A. MacPhail. 2020. Changing the ‘Message’ of School Physical Education in Response to COVID-19: Avoiding the ‘New Normal’. *International Forum for Teacher Educator Development*. https://infoted.eu/author/ann_dean/
- Centers for Disease Control and Prevention. U.S. Obesity Trends. (2011). Retrieved from: <https://www.cdc.gov/obesity/data/adult.html>
- Chalabaev, A., Sarrazin, P., Fontayne, P., Boiché, J., & Clément-Guillotin, C. (2013). The Influence Of Sex Stereotypes And Gender Roles On Participation And Performance In Sport And Exercise: Review And Future Directions. *Psychology of Sport and Exercise*, 14(2), 136–144. doi:10.1016/J.Psychsport.2012.10.005
- Chan, W., Leung, K., Ho, C., Wu, C. W., Lam, K. Y., Wong, N. L., Chan, C. Y. R., Leung, K. M. & Tse, A. C. (2019). Effectiveness of online teaching in physical education during COVID-19 school closures: a survey study of frontline physical education teachers in Hong Kong. *Journal of Physical Education and Sport*, 21(4), 205, 1622-1628. DOI:10.7752/jpes.2021.04205
- Chawinga, W. & Zozie, P. (2019). Increasing Access to Higher Education Through Open and Distance Learning: Empirical Findings From Mzuzu University, Malawi. *International Review of Research in Open and Distributed Learning*, 17(4), 1–20. <https://doi.org/10.19173/irrodl.v17i4.2409>
- Chen, D. (2019). Taylor and Francis Online. *Cogent Education*. Volume 6. Issue <https://www.tandfonline.com/doi/full/10.1080/2331186X.2019.1611052>
- Chiekem E. Grading Practice as Valid Measures of Academic Achievement of Secondary Schools Students for National Development. *Journal of Education and Practice*. Vol 6. No.26, 2015. <https://files.eric.ed.gov/fulltext/EJ1077389.pdf>
- Chrisler, J. & Mc Creary, D. (2012). *Handbook of Gender Research In Psychology*. Vol. 1. Springer.

- Columbano, M. (2019). Development and Validation of Modules in Basic Mathematics to Enhance Students' Mathematics Performance. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), 4203–4207. <https://doi.org/10.35940/ijitee.L2684.1081219>
- Cos, F. & Paguia, M. (2021) Factors Affecting Distance Learning of Carrascal National High School, Division of Surigao del Sur. https://www.researchgate.net/publication/352256445_Factors_Affecting_Distance_Learning_of_Carrascal_National_High_School_Division_of_Surigao_del_Sur
- Cruz, M. (2019). Inquirer.net. More women in HS, college than men in PH, says report. <https://newsinfo.inquirer.net/1206375/more-women-in-hs-college-than-men-in-ph-says-report#:~:text=The%202020%20Global%20Gender%20Gap,percent%2C%20respectively%2C%20among%20men.>
- Dangle, Y. & Sumaang, J. (2020). The Implementation of Modular Distance Learning in the Philippine Secondary Public Schools. <https://www.dpublication.com/wp-content/uploads/2020/11/27-427.pdf>
- Dargo, J. & Dimas, M. (2021). Modular Distance Learning: Its Effect in the Academic Performance of Learners In the New Normal. <https://journal.stkipingsikawang.ac.id/index.php/JETL/article/view/2672>
- Department of Economic and Social Affairs Social Inclusion (2020). United Nations, UN Centre News. <https://www.un.org/development/desa/dspd/2015/10/un-adopts-new-global-goals-for-people-and-planet-by-2030/>
- Du Plessis C. D., Alexander, L., Ashipala, D. & Kamenye, E. (2016). Experiences of student support in the distance mode bachelor of Nursing Science degree at the University of Namibia. *International Journal of Higher Education*, 5(4). <https://doi.org/10.5430/ijhe.v5n4p103>
- Dwiyogo, W. D., Supriyadi & Sapto, A. (2017). Sports Access Learning (SAL) to Promote SelfRegulated Learning: a Need Analysis. *Advances in Social Science, Education and Humanities Research*, 164, 69.
- Ellwood, B. (2021). High school students who attended school remotely during the pandemic report worse social, emotional, and academic well-being. *Social Psychology*. <https://www.psypost.org/2021/08/high-school-students-who-attended-school-remotely-during-the-pandemic-report-worse-social-emotional-and-academic-well-being-61669>
- Engzell P., Frey A., & Verhagen M., (2021). Learning loss due to school closures during the COVID-19 pandemic. *PNAS*, 118(17). <https://doi.org/10.1073/pnas.2022376118>
- Erümit, S. (2021). The distance education process in K–12 schools during the pandemic period: evaluation of implementations in Turkey from the student perspective, *Technology, Pedagogy and Education*, 30(1), 75-94, DOI: 10.1080/1475939X.2020.1856178
- European Journal for Sport and Society (2020). Sport in the face of the COVID-19 pandemic; towards an agenda for research in the sociology of sport. *European Journal for Sports and society*, 17(2), 85-95.
- Frontiers of Sports and Active Living (2021). BRIEF RESEARCH REPORT article *Front. Sports Act. Living*. <https://www.frontiersin.org/articles/10.3389/fspor.2021.716566/full>
- Gall'skoya, N. D. (2011). *Modern language teaching methods*. Moscow: Arkti-Glossa, 165.
- Garcia, E. & Weiss, E. (2020). COVID-19 and student performance, equity, and U.S. education policy; Lessons from pre-pandemic research to inform relief, recovery, and rebuilding. <https://www.epi.org/publication/the-consequences-of-the-covid-19-pandemic-for-education-performance-and-equity-in-the-united-states-what-can-we-earn-from-pre-pandemic-research-to-inform-relief-recovery-and-rebuilding/>
- Global Dominion Financial Incorporated. (2021). *Online Class or Modular Class*

- Which is Better?. <https://gdfi.com.ph/online-or-modular-class/>
- Gnaulati, E. (2014). The Atlantic. <https://www.theatlantic.com/education/archive/2014/09/why-girls-get-better-grades-than-boys-do/380318/>
- Grecic, G., Sprake, A. & Taylor, R. (2020). PE can do much more than keep children fit – but its many benefits are often overlooked. The Conversation. <https://theconversation.com/pe-can-do-much-more-than-keep-children-fit-but-its-many-benefits-are-often-overlooked-148595>
- Grunfeld, D. (2012). SB Nation. LeBron Reading and How Books Can Benefit A Pro Athlete. <https://www.sbnation.com/nba/2012/9/13/3322842/lebron-james-reading-dan-grunfeld>
- Gueta M. F. & Janer, S. S. (2021). Distance Learning Challenges on the Use of Self Learning Module, United International Journal for Research & Technology, 2(7). <https://uijrt.com/articles/v2/i7/UIJRTV2I70010.pdf>
- Habe, K., Biasutti, M. & Kajtna, T. (2021). Wellbeing and flow in sports and music students during the COVID-19 pandemic. Thinking Skills and Creativity, 39. <https://doi.org/10.1016/j.tsc.2021.100798>
- Hammer, T. M. (2017). Physical activity among children and youth. An overview of Norwegian studies Report; NTNU. <https://samforsk.no/Sider/Publikasjoner/Fysisk-aktivitet-og-idrettsdeltagelse-blant-barn-og-unge.aspx>
- Hani, A. (2021). Philippine Government Unveils Digital Projects for Remote Learning. OPENGOV. <https://opengovasia.com/philippine-government-unveils-digital-projects-for-remote-learning/>
- Heather, G. (2020). Texas A&M University College of Education & Human Development. Integrating Physical Activity into Distance Education. <https://today.tamu.edu/2020/04/08/integrating-physical-activity-into-distance-education/>
- Hung, M. L., Chou, C., Chen, C. H., & Own, Z. Y. (2010). Learner readiness for online learning: Scale development and student perceptions. Computers & Education, 55(3), 1080-1090. DOI:10.1016/j.compedu.2010.05.004
- Ilonga, A., Ashipala, D. O. & Tomas, N. (2020). Challenges Experienced by Students Studying through Open and Distance Learning at a Higher Education Institution in Namibia: Implications for Strategic Planning. International Journal of Higher Education 9(4). <https://doi.org/10.5430/ijhe.v9n4p116>
- International Conference On Social Studies, Globalisation And Technology (2020). Proceedings of the International Conference On Social Studies, Globalisation And Technology. <https://www.atlantispress.com/proceedings/icssgt19/125942810>
- Isidori, E. (2020). Sports Pedagogy at the Time of COVID-19. CCD 44(15), 145-146. <https://ccd.ucam.edu/index.php/revista/article/view/1480/493>
- Işikgöz, E., Esentaş, M., & Şahin, H. (2017). Perception of the students in studying school of Physical Education and Sports on Distance Education. Knowledge International Journal, 20(1), 391 - 400. <https://ikm.mk/ojs/index.php/KIJ/article/view/2941>
- Islam, S., Baharun, H., Muali, C., Ghufon, M., Iq Bali, M., Wijaya, M. & Marzuki, I. (2018). To Boost Students' Motivation and Achievement through Blended Learning. IOP Conf. Series: Journal of Physics: Conf. Series 1114. doi :10.1088/1742-6596/1114/1/012046
- Jehdnet.com. (2018) Factors Influencing the Academic Achievement of Students. http://jehdnet.com/journals/jehd/Vol_7_No_3_September_2018/12.pdf
- Karal, H. & Cebi, A. (2012). Views on Modular Assessment and Evaluation Process in Distance Education. Procedia - Social and Behavioral Sciences, 46, 2073-2077. <https://doi.org/10.1016/j.sbspro.2012.05.430>
- Karalis, T. & Raikou, N. (2020). Teaching at the Times of COVID-19: Inferences and Implications for Higher Education Pedagogy. International Journal of Academic Research in Business and Social Sciences, 10(5), 479–493.
- Kessel et al., (2016) Plos One. San Francisco, California.

- <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0150817>
- Kolb, A. & Kolb, D. (2017). *Experiential Learning & Teaching in Higher Education*. NOVA Southeastern University. <https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1005&context=elthe>
- Konukman, F. & Beard, J. (2020). Teaching Online Physical Education: The Art of Connection in the Digital Classroom. *Journal of Physical Education, Recreation & Dance*, 91(7), 49-51. <https://doi.org/10.1080/07303084.2020.1785772>
- Kovalenko, N. & Smirnova, A. (2015). Self-directed Learning through Creative Activity of Students. *Procedia - Social and Behavioral Sciences*, 166, 393-398. <https://doi.org/10.1016/j.sbspro.2014.12.542>
- Lalu, G. P. (2021). 42% of school-age Filipinos don't use devices for distance learning — SWS. *Inquirer*. <https://newsinfo.inquirer.net/1402187/42-of-school-age-filipinos-dont-use-devices-for-distance-learning-sws>
- Lau, E. Y. H., & Lee, K. (2020). Parents' views on young children's distance learning and screen time during COVID-19 class suspension in Hong Kong. *Early Education and Development*, 1-18.
- Liu, S. (2018). Student Interaction Experiences in Distance Learning Courses A Phenomenological Study. <https://www.westga.edu/~distance/ojdla/spring111/Liu111.html>
- Malia, D. & Lim, H. (2021). How do students perceive face-to-face/blended learning as a result of the Covid-19 pandemic?. *The International Journal of Management Education*, 19(3). <https://doi.org/10.1016/j.ijme.2021.100552>
- Manalo, F. & De Villa, J. (2020). Secondary Teachers' Preparation, Challenges, and Coping Mechanism in the Pre -Implementation of Distance Learning in the New Normal. *International Multidisciplinary Research Journal* 2(3), 144-154 DOI:10.5281/zenodo.4072845
- Mitchell, L. (2020). George Lucas Educational Foundation. 6 strategies for Successful Distant Learning. <https://www.edutopia.org/article/6-strategies-successful-distance-learning>
- Morante et al., (2017). *Australian Journal of Adult Learning*. Volume 57. Number 2. <https://files.eric.ed.gov/fulltext/EJ1148628.pdf>
- Namli, A. & Samioğlu, Y. (2020). Physical Education Lesson in Distance Education According to Student Views. *Journal of Global Sport and Education Research*, 3 (2), 49-65. <https://dergipark.org.tr/en/pub/jogser/issue/59284/874908>
- Natividad, E. (2021). Perceived Effectiveness of Self Learning Modules in the Implementation of Modular Distance Learning in the Elementary Level. <http://dx.doi.org/10.2139/ssrn.3889429>
- National University. (2022). <https://www.nu.edu/resources/challenges-of-distance-learning-for-students/>
- N.C. State Board of Education (2021). Poor test scores show effects of school closures, remote learning. *David Bass Carolina Journal*; Laurinburg Exchange. <https://www.laurinburgexchange.com/news/52718/poor-test-scores-show-effects-of-school-closures-remote-learning>
- Nettlefold, L., McKay, H., Warburton, D., McGuire, K., Bredin, S., and Naylor, P. (2011). The challenge of low physical activity during the school day: at recess, lunch and in physical education. *Br. J. Sports Med.* 45, 813–819. doi:10.1136/bjism.2009.068072
- Niyazova R.R. & Hasanova, G.M. (2020). Analysis of Effective Teaching Methods for Activating the Educational and Cognitive Abilities of Students of the Uzbek State University of Physical Culture and Sports. *Eurasian Union of Scientists (ESU)*, 7(76), 32-34. DOI: 10.31618/ESU.2413-9335.2020.7.76.944
- Osman, N. & Hamzah, M. I. (2020). Impact of Implementing Blended Learning on Students' Interest and Motivation. *Universal Journal of Educational Research*, 8 (4), 1483-1490. DOI:10.13189/ujer.2020.080442

- Online Business School. (2022). Unit 3, Westwood House, Westwood Business Park.
<https://www.onlinebusinessschool.com/how-the-flexibility-of-online-learning-is-helping-online-learning/>
- Réka, J., Kármén, D., Susana, F., Kinga, K. J., Edit, M., & Kinga, S. (2015). Implications of motivational factors regarding the academic success of full-time and distance learning undergraduate students: A self-determination theory perspective. *Procedia-Social and Behavioral Sciences*, 187, 50-55.
- Researchgate.Gmbph. 2022.
https://www.researchgate.net/publication/234082597_A_COMPARISON_of_student_satisfaction_between_traditional_and_blened_technology_course_offerings_in_physical_education
- Richland Montessori School. (2020). Wix.com <https://www.richlandmontessorischool.com/distance-learning-option-1-modular>
- Schofield T. (2022) Study.com. 2003-2022.
<https://study.com/academy/lesson/age-appropriate-physical-education-activities-instruction.html>Strategic Communications. (2017). Jain Heritage School. <https://www.jhs.ac.in/6-reasons-why-sports-is-important-in-a-students-life.php>
- Sequeira, A. (2012). Researchgate.net. Self-Learning is the Future: A New Paradigm for the 21st Century.
https://www.researchgate.net/publication/256027472_Self-Learning_is_the_Future_A_New_Paradigm_for_the_21st_Century#:~:text=Self%2Dlearning%20modules%20are%20designed,characteristic%20in%20open%20learning%20process.
- Shape America. (2020). Distance Learning for Physical Education and Health Education.https://www.shapeamerica.org/advocacy/reentry/Distance_Learning_for_HPE.aspx
- Silva, R. C. & Silva, V. L. (2019). Distance learning for teaching in physical education. *Motriz: Revista de Educação Física*, 25(1). <https://doi.org/10.1590/S1980-6574201900010002>
- Tate, J., Schubert, C. & McCoy, C. (2014). Understanding Modular Learning- Developing a Strategic Plan to Embrace Change. <https://files.eric.ed.gov/fulltext/EJ1097629.pdf>
- Taylor and Francis Group. (2021). *Journal of Physical Education, Recreation and Dance*. Volume 92, 2021-issue 4. <https://www.tandfonline.com/doi/abs/10.1080/07303084.2021.1886836>
- Taylor J.S. (2012). Students' and Teachers' Perceptions of Physical Education. AvondaleUniversity.https://research.avondale.edu.au/cgi/viewcontent.cgi?article=1010&context=the_ses_bachelor_honours&fbclid=IwAR1REMiV2vcu-H62Ijs99w-tCXHDAxfGYj-9YI-ZVvMUDX8aaPCxvCyu6U
- Texas A&M Today. <https://today.tamu.edu/2020/04/08/integrating-physical-activity-into-distance-education/>
- Tuguic, L. (2021). Challenges of the New Normal: Students' Attitude, Readiness and Adaptability to Blended Learning Modality. *International Journal of English Literature and Social Sciences*, 6(2), 443-444.
<https://ijels.com/Journal DOI: 10.22161/ijels>
- Turan, M. & Koc, K. (2018). The Impact of Self-Directed Learning Readiness on Critical Thinking and Self-Efficacy among the Students of the School of Physical Education and Sports. *International Journal of Higher Education*. 7(6).
<https://www.sciencedupress.com/journal/index.php/ijhe/article/view/14580>
- Turkish Ministry of Health (2020). COVID-19 outbreak management and study guide. Ankara Turkey. <https://www.tandfonline.com/doi/epub/10.1080/07303084.2020.1816099?needAccess=true>
- Vernadakis, N., Tsitskari, E. & Kioumurtzoglou, E. (2012). A comparison of student satisfaction between traditional and blended technology course offerings in physical education. *The Turkish Online Journal of Distance Education*, 13(1).
- Vilchez, J., Kruse, J., Puffer, M., & Dudovitz, R. (2021). Teachers and School Health Leaders' Perspectives on Distance Learning Physical Education During the COVID-19 Pandemic.
<https://doi/full/10.1111/josh.13030>

- Wang, S., Do, B. & Dunton, G. (2020). Early effects of the COVID-19 pandemic on physical activity and sedentary behavior in children living in the U.S; BMC Public Health 20, 1351 (2020).
<https://doi.org/10.1186/s12889-020-09429-3>
- Yano, S. & Chang, G. (2020). How are countries addressing the Covid-19 challenges in education? A snapshot of policy measures. UNESCO's Section of Education Policy.
<https://gemreportunesco.wpcomstaging.com/2020/03/24/how-are-countries-addressing-the-covid-19-challenges-in-education-a-snapshot-of-policy-measures/>
- Yu, Z. (2021). Springer Open. The Effects of gender, educational level, and personality on online learning outcomes during the COVID-19 pandemic.
<https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-021-00252-3>