CHALLENGES EXPERIENCED AND COPING MECHANISM OF TEACHERS IN THE IMPLEMENTATION OF DISTANCE LEARNING

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ABSTRACT

The study aimed to determine the relationship between the perceived challenges and expressed coping mechanism of teachers in the implementation of distance learning in Sirawan National High School, Sirawan, Toril, Davao City. Utilizing the descriptive-correlational research design for an in-depth analysis of the study, the researcher used the survey on perceived challenges of Raagas (2021) and survey on coping mechanism used by De Villa, et al., (2020) in their study. Standard Deviation, Weighted Mean and Spearman's rho were the statistical tools used. The data revealed high extent of perceived challenges and good coping mechanism in terms of positive well-being and time management while very good on openness to change, peer mentoring and collaboration. Moreover, this study shows a significant relationship between the perceived challenges and expressed coping mechanism of teachers in terms of openness to change, peer mentoring and collaboration while no significant relationship was found on positive well-being and time management. Though barriers surfaced during the implementation of distance learning, teachers find its ways to overcome it to cope with the challenges of the new normal. These help them meet the demands of the learning modality and being able to perform their duties and responsibilities as facilitators of learning to attain quality education despite this pandemic.

Keywords: Challenges Met, Coping Mechanism, Teachers, Distance Learning

1. INTRODUCTION

The immediate transitions and improved sophistication of today's world existing challenges and establish new demands on our education system, Department of Education (DepEd) generates plenty of problems for students and teachers, but because the government's signed to pursue the school year 2020-2021. The teacher, who considers the second mother of a student, was having a tough time addressing the new normal founded. Simultaneously, the shortage of apparatus and material support at the start of the category, whether we Filipinos can handle this new test in our lives. With this, plenty of scholars and even teachers experience stress and burnout while sailing amid the pandemic.

Having been able to finish the present school year, facts cannot be denied that struggles among teachers, school heads, parents, pupils, and other stakeholder in the implementation of distance learning modalities is visible. The immediate change in the curriculum made everyone create innovative ways to make learning easy while students are learning at home. Parents and other members of the family experienced being the learning facilitators at home. The teacher takes the responsibility of monitoring the progress of the students. The students may ask assistance from the teacher via e-mail, telephone, text message/instant messaging among others. Where possible, the teacher does home visitation to students needing immediate attention, remediation, and assistance. Printed modules and other learning materials were delivered to students through their parents or guardians and sometimes teachers had to tap the Barangay Local Government Units to ask for assistance in the delivery and retrieval of the modules.

Since education is no longer held within the school, parents serve as partners of teachers in education. Parents play a vital role as home facilitators, guidance counselor, modulator, facilitator, and other functions of teachers in school. Their primary role in modular learning or blended learning is to establish a connection and guide the child (FlipScience, 2020) in accomplishment the activities in the learning materials given.

With the announcement of Secretary Leonor Magtolis Briones that the president of the Philippines, Hon. Rodrigo R. Duterto that school year 2021-2022 will start on September 13, 2021 has created more questions on whether the previous learning modality has been successfully implemented. Are the teachers ready to face another challenging school year? Are they able to learn lessons from the previous school year? Are they equipped with the knowledge, skills, and materials for another battle to face? Are the challenges encountered in the previous school year addressed? These are only some of the questions that the researcher had formulated which motivated her to conduct this study. Thus, this study aims to determine the challenges encountered by the teachers and how they overcome these challenges. An intervention plan will be formulated based on the findings of the study.

It is in the rationale that the researcher who is currently teaching in the above mentioned local, would like to delve worthy research undertaking that will benefit the school she is currently teaching and that of her Graduate Program. The study involved secondary teachers of Sirawan National High School, Sirawan, Toril, Davao City.

The coronavirus disease 2019 (COVID-19) pandemic continuously impacts educational systems around the world and this paradigm shift is changing dramatically in the Philippines. With this, teachers' roles are critical in ensuring that students learn successfully. The occurrence of the COVID-19 put schools, teachers, students, parents, and other stakeholders to the test. Many school districts moved activities online in order to maintain instruction even when schools were closed (Organization for Economic Co-operation and Development, 2020). Aside from online learning, most public schools especially in remote areas employed modular instruction through printed self-learning modules. Additionally, most students (Cos et al., 2021; Manlangit et al., 2020) and parents opted the modular distance learning among other alternative modalities.

On a regular basis, difficulties in applying the distance learning strategy developed. Dangle and Sumaoang (2020) asserted that the key challenges that occurred were the shortage of school finances in the creation and delivery of modules. Cardullo et al. (2021) added that teachers were caught off guard for emergency remote instruction owing to a lack of distant education expertise as well as computer literacy. Indeed, the pandemic tests the teachers' flexibility and adaptation in times of crisis. As a result, it motivates them to come up with innovative ways to interact with their learners.

Teachers underwent training to equip them to provide better teaching in the face of the COVID-19 threat. Still, teachers cannot simply ignore uncontrolled circumstances (Lagua, 2020). Despite the challenges, educators continue to make learning possible, doing everything they can to acclimate to the new normal.

One of the teachers' abilities is to adapt in the face of adversity. Different challenges arise, particularly during this difficult time, and teachers are still adjusting to the new normal. As a result, teachers employ a variety of coping strategies to deal with the difficulties they face. These coping mechanisms assist teachers in overcoming challenges and are a great help in improving the situation. With the foregoing facts and observations added by the lacuna in the literature concerning the experiences of schools, Philippines towards modular distance learning, this study determined the challenges encountered by high school teachers. It also described their coping mechanisms, which will aid in the resolution of issues that may arise during the implementation of the new normal alternative learning system. Lastly, it seeks to suggest a plan of action to avoid these challenges based on the participant's coping mechanism.

The pandemic has a significant impact on education in the country, where academic institutions and schools encounter major adjustments. The pandemic caused hindrances to face-to-face education (Abbas, 2021; Cos et al., 2021). The education sectors work together to ensure the continuity of education and that every school continues to achieve its goal and vision of providing excellent education to every Filipino student (Dangle & Sumaoang, 2020).

As a result, the Department of Education (DepEd) instituted DepEd Order No.12 series of 2020, which formulated new learning delivery modalities at all levels, as represented in the Learning Continuity Plan (LCP) for the school year 2020-2021 up to the present (Guiamalon et al., 2021). Different learning modalities presented include online distance learning, blended learning, homeschooling, and modular distance learning in digital or printed format. Among the different modalities offered, the use of printed self-learning modules is the method used by most public schools. It is because only a few learners, especially in remote areas can access the internet since only a few have gadgets and there is a limited internet connection.

Teachers play a crucial role in ensuring that students get the most out of the modules that are delivered to them during the pandemic. Tosun et al. (2021) noted the lack of experience among teachers towards the current situation. Regardless of any circumstances, Pentang (2021c) stated that teachers must use available and applicable pedagogy to effectively deliver their lessons. Despite the challenges posed by the COVID-19 pandemic, teachers continue to serve by developing modules that act as students' learning guides (Lapada, 2020).

However, Malipot (2020) stressed that teachers also air their problems on modular distance learning such as: reproduction costs and being forced to attend school as late as 11:00 p.m. to complete the printing on time. Macaraeg et al. (2021) mentioned that the country's Teachers Dignity Coalition claimed that modular distance learning has created extra workload, health risks, and additional expenses which causes teachers to beg for donations of bond paper and ink to print. These only evidently show that challenges really do exist in the use of printed self-learning modules. Despite challenges that may impede their work, teachers manage to cope with the new normal and complete their tasks (De Villa & Manalo, 2020). To verify the findings and insights above, this study was carried out to picture the realities and trends concerning the challenges and coping mechanisms of high school teachers in Sirawan National High School, Toril, Davao City.

Interaction. A theoretical construct of recent interest to distance educators, and one that has received much attention in the theoretical literature, is that of interaction. Moore (1989) discusses three types of interaction essential in distance education. Learner-instructor interaction is that component of his model that provides motivation, feedback, and

dialogue between the teacher and student. Learner-content interaction is the method by which students obtain intellectual information from the material.

Learner-learner interaction is the exchange of information, ideas, and dialogue that occur between students about the course, whether this happens in a structured or non-structured manner. The concept of interaction is fundamental to the effectiveness of distance education programs as well as traditional ones.

Hillman, Willis, and Gunawardena (2019) have taken the idea of interaction a step farther and added a fourth component to the model learner-interface interaction. They note that the interaction between the learner and the technology that delivers instruction is a critical component of the model, which has been missing thus far in the literature.

They propose a new paradigm that includes understanding the use of the interface in all transactions. Learners who do not have the basic skills required to use a communication medium spend inordinate amounts of time learning to interact with the technology and have less time to learn the lesson. For this reason, instructional designers must include learner-interface interactions that enable the learner to have successful interactions with the mediating technology.

Specifically, this study sought to answer the following questions:

1. What is the extent of challenges met by teachers in the implementation of distance learning?

2. What are the coping mechanisms of teachers to address the challenges in terms of the following:

2.1 Positive well-being;

2.2 Time management;

2.3 Openness to change;

2.4 Peer mentoring; and

2.5 collaboration?

3. Is there a significant relationship between the challenges met and coping mechanisms of teachers in the implementation of distance learning?

4. What intervention plan can be proposed based on the findings of this study?

2. METHODOLOGY

This study employed the descriptive-correlational research design employing the qualitative and quantitative data to determine the relationship between the perceived challenges and expressed coping mechanism of teachers in the implementation of distance learning. Sirawan National High School of Sirawan, Toril, Davao City is the main locale of the study.

The thirty-five (35) teachers in the said locale are the main respondents of the study and a survey developed by Raagas (2021) in her study Challenges, Opportunities and Performance of Elementary Teachers in times of Pandemic and survey used by De Villa, et al. (2020) in their study on Secondary Teachers' Preparation, Challenges and Coping Mechanism in the Pre-Implementation of Distance Learning in the New Normal were utilized. This research focused in determining the extent of challenges met and teachers expressed coping mechanism in the implementation of distance learning and its relationship. A Proposed Intervention Plan based on the findings of the study is the output.

There are 35 teachers involved in this study. The research instruments were distributed personally with consent from the Local IATF and strictly following the prescribed Health Protocol during the school meeting.

The criteria for inclusion of the teachers are the following: resident of the locality, teaches at the identified school, more than three (3) years of teaching experience, and has used Distance Learning as learning modality during pandemic.

The research instrument was downloaded from the study of Shiela B. Makabenta of Western Leyte College (2021). The research Instrument is divided into two parts –Part 1.

Perceived Extent of Challenges in the Implementation of Distance Learning with 15 questions; Part 2. Expressed Coping Mechanism to Address Challenges in the Implementation of Distance Learning. The downloaded instrument has been pilot tested and validation was made thereafter and Cronbach 0.79 was achieved.

The Standard Deviation and Weighted Mean were employed to determine the extent of challenges encountered and teachers expressed coping mechanism in the implementation of distance learning. Spearman rho was used to determine the significant relationship between the dependent and independent variables of the study. The researcher constructed two 5-point Likert scales which were used in the interpretation and analysis of the data collected.

3. RESULT

Challenges met by teachers in the implementation of distance learning

It was revealed on the table that the perceived extent of challenges met in the implementation of distance learning has an overall perception of 4.28 with standard deviation of .35 which is interpreted as high. This means that teachers agree that they met challenges as they implement distance learning. This implies that since distance learning is new modality to all school personnel and stakeholders and with the fact that the school heads had provided the teachers with their needs, still we cannot do away with them experiencing challenges.

Moreover, with the unstable internet connectivity, parents who lack the desire and ability to teach their children the substance of the lessons and teachers continue to work overtime only to comply with all of these undertakings are the indicators with very high extent of perceived challenges. This means that these indicators contribute most of the challenges that teachers experienced while implementing distance learning. on the other hand, lack of materials and equipment for the reproduction of learning resources got the lowest mean of 4.03 which is interpreted as high. This means that the government has done its task to provide the materials and equipment for the reproduction of learning materials. And with the initiative of the teachers and school head, they were able to tap stakeholders who can assist them in providing these materials.

Coping mechanisms of teachers to address the challenges in terms of

Positive well-being; Time management; Openness to change;

Peer mentoring; and collaboration

It was revealed on the table that the teachers expressed coping mechanism to address challenges in the implementation of distance learning in terms of positive well-being has an average mean of 4.30 with standard deviation of 0.32 which is interpreted as good. This means that teachers often expressed positive well-being as their coping mechanism to address challenges in the implementation of distance learning. this implies that encouraging outlook, self-confidence gained from encouragement and motivation, healthy lifestyle and stress reduction allows them to continue performing their duties and responsibilities despite the challenges of these trying times.

Moreover, this table also revealed that teachers expressed coping mechanism to address challenges in the implementation of distance learning in terms of time management has an average mean of 4.49 with standard deviation of 0.28 which is interpreted as good. This means that teachers often expressed proper time management to meet the demands of home and work. This implies that time management help them accomplish things on time. This lets them attend school duties, do household chores and regain energy through rest. This implies further that establishing routines through habits and practices in a set schedule help them to utilize time efficiently.

Furthermore, it was also revealed on the table that teachers expressed coping mechanism to address challenges in the implementation of distance learning in terms of openness to change has an average mean of 4.53 with standard deviation of 0.44 which is interpreted as very good. This means that being flexible and adaptive to changes allows them to survive and still succeed. This implies that flexibility and adaptability are important qualities that every teacher must acquire.

Additionally, it was revealed on the table that teachers expressed coping mechanism to address challenges in the implementation of distance learning in terms of peer mentoring has an average mean of 4.54 with standard deviation of 0.43 which is interpreted as very good. This means that peer mentoring always helps them to collaborate and share best practices. They seek guidance and support from one another especially in preparing learning resources or materials. This implies that as teachers embrace change, peer mentoring allows them to build confidence and nurture competence in the new normal. They value the support gained from one another as a beneficial way to stay connected.

Finally, this table also presents the teachers' expressed coping mechanism to address challenges in the implementation of distance learning in terms collaboration. It was revealed on the table that the teachers expressed coping mechanism to address challenges in the implementation of distance learning in terms of collaboration has an average mean of 4.58 with standard deviation of 0.36 which is interpreted as very good. This means that due to limited resources, the gaps are filled through the continuous support of stakeholders through community engagement and partnership. This implies that everyone in the school system is involved in designing learning opportunities to attain quality education despite of this pandemic.

Significant relationship between the challenges met and coping

mechanisms of teachers in the implementation of distance learning

It was revealed on the table that the r value of -0.9 is less than the p-value of .607 at .05 level of significance so null hypothesis is negligible, so null hypothesis is accepted. This means that there is no significant relationship between the

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perceived challenges met and teachers expressed coping mechanism in terms of positive well-being. This implies that being positive does not mean that an individual will no longer be experiencing challenges. Challenges are still present especially if the modality or situation is new. Since COVID-19 became pandemic, the field of education has experienced drastic changes including the adoption of remote learning. These changes contribute meaningfully to the challenges that teachers met in the implementation of distance learning.

Moreover, the table also revealed that the r value of -.09 is less than the p-value of .272 at .05 level of significance which is interpreted as weak, so null hypothesis is accepted. This means that there is no significant relationship between the perceived challenges met and teachers expressed coping mechanism in terms of time management. This implies that time management as coping mechanism does not affect the challenges met by teachers in the implementation of distance learning. This implies further that despite the fact of careful planning and time management to meet the needs of the learners, still challenges are present.

Furthermore, the table revealed that openness to change has an r value of .577 which is greater than the p-value of .001 at .05 level of significance which is interpreted as moderate, so null hypothesis is rejected. This means that there is significant relationship between the perceived challenges met and teachers expressed coping mechanism in terms of openness to change. This implies that due to this pandemic, teachers and other people had encountered challenges which made their lives change. Being positive and open to whatever changes in the curriculum or learning modality can help them address the perceived challenges. Working with positive mind results to a successful educational endeavor.

Additionally, this table also presents the extent of perceived challenges met and teachers expressed coping mechanism in terms of peer mentoring. It was revealed on the table that the r value of .418 is greater than the p value of .013 which is interpreted as moderate, so null hypothesis is rejected. This means that there is a significant relationship between the extent of challenges met and expressed teachers coping mechanism in terms of peer mentoring. This implies that with the changes in the curriculum and learning modality, teachers need mentoring to achieve educational goals. To address these challenges, asking for help and sharing of best practices is important and the conduct of peer tutoring within and outside of the school support them in making their work easier and achievable.

Finally, the table shows the extent of perceived challenges met and teachers expressed coping mechanism in terms of collaboration. It was revealed on the table that the r value of .402 is greater than the p value of .017 which is interpreted as moderate, so null hypothesis is rejected. This means that there is a significant relationship between the extent of challenges met and expressed teachers coping mechanism in terms of collaboration. This implies that working with fellow teachers and helping one another to accomplish the tasks given contributes to address the challenges met in the implementation of distance learning. This implies further that seeking for support from the stakeholders and engaging the community in the education of the pupils may help ease the challenges met by the teachers. Due to this pandemic, remote learning or learning at home is implemented by most of the schools in the country. With these, parents or guardians are the learning facilitators of the pupils. By collaborating with stakeholders, the burden of going to respective households of the learners which contributes risks to teachers and pupils, help in meeting the demands of this new learning modality and teachers will be able to perform their duties and responsibilities as facilitators of learning.

Suggested plan of action based on the findings of this study

In dealing with various challenges that may emerge throughout the teaching process, teachers may have these plans of action.

Safety & health protocols. Teachers should make it a habit to always practice safety and health protocols to mitigate the spread of the virus as well as not to get infected while performing their function in and out of the school, and they are encouraged to get fully vaccinated.

It is best for schools to install designated hand-washing areas, provide hygiene kits for teachers, and limit the entry of clients within the vicinity with stricter implementation of the safety and health protocols.

Lack of resources. Teachers may direct the concerns to the proper authority. They may also look for sponsorships and work on donation drives or fund-raising campaigns, or partner with their co-teachers to minimize the problems pertaining to the printing of modules.

Schools may allot more budget in the production, distribution, and retrieval of modules from their Maintenance and Other Operating Expenses.

Internet connection. Teachers may install Wi-Fi boosters and external antennas. Schools may also provide sufficient load cards to the teachers. Further, the Department of Education may enter with a memorandum of understanding/agreement with the Department of Energy and Department of Information and Communications

Technology to support the electrification of remote areas and a establish strong internet connection, respectively, for the schools, teachers, students, and parents to connect and communicate with each other.

Modules. Teachers should double-check downloaded modules before distributing them to the students. In case of no available modules to download, they can create one by referencing the competencies of the subject. Teachers may also provide fewer activities but are still aligned with the necessary competencies.

Giving instruction. Teachers must try to explain in every way possible for students to easily understand the given instruction. Also, teachers must be always open and give chance for the students to raise questions. If possible, provide examples and illustrations to facilitate the students. Since feedback is important (Pentang, 2021a), teachers may further allow both the students and parents to provide theirs.

Monitoring and evaluation. Teachers must keep records of students' accomplished outputs (both formative and summative) and keep them informed of their performance (transparency). Pre- and post-tests may be required where research may take place to help define the progress of the students.

Teachers must recheck provided answer keys to avoid errors. Teachers may also check for plagiarism for essay-type questions. Further, teachers should return the graded outputs of their students. Since monitoring and evaluation are equally important in ensuring quality education and preparing competitive graduates (Kankaew et al., 2021), stricter measures may be implemented by schools and concerned teachers.

Distribution and retrieval of modules. Teachers must be consistent with the schedule. To be efficient, distribute modules and retrieved outputs during home visits. More importantly, ensure the completeness of entries and details before allowing the students to submit. With the technological advancements in education with the continuing development in educational technologies as teaching-learning tools (De Souza et al., 2021; Pentang, 2021b), teachers may explore online and offline tools to facilitate the distribution and retrieval of modules.

Parent's support. Teachers must earn the support of the parents and partner with them to help the students learn with their modules. It is best to involve them in classroom conferences and keep them informed of the student's progress in school. The whole community may take part too (Capulso et al., 2021).

4. ANALYSIS

Teachers agree that they met challenges as they implement distance learning. This implies that since distance learning is new modality to all school personnel and stakeholders and with the fact that the school heads had provided the teachers with their needs, still we cannot do away with them experiencing challenges.

Teachers often expressed positive well-being as their coping mechanism to address challenges in the implementation of distance learning; encouraging outlook, self-confidence gained from encouragement and motivation, healthy lifestyle and stress reduction allows them to continue performing their duties and responsibilities despite the challenges of these trying times. Teachers often expressed proper time management to meet the demands of home and work; attend school duties, do household chores and regain energy through rest, and establishing routines through habits and practices in a set schedule help them to utilize time efficiently.

This means that being flexible and adaptive to changes allows them to survive and still succeed; flexibility and adaptability are important qualities that every teacher must acquire. Teachers embrace change, peer mentoring allows them to build confidence and nurture competence in the new normal. They value the support gained from one another as a beneficial way to stay connected.

There is limited resources, therefore, the gaps are filled through the continuous support of stakeholders through community engagement and partnership; everyone in the school system is involved in designing learning opportunities to attain quality education despite of this pandemic.

There is no significant relationship between the perceived challenges met and teachers expressed coping mechanism; being positive does not mean that an individual will no longer be experiencing challenges.

5. DISCUSSION

The data revealed that there is a significant relationship between perceived challenges in the implementation of distance learning and expressed coping mechanism of teachers as regards to openness to change, peer mentoring and collaboration. On the other hand, the relationship between perceived challenges in the implementation of distance learning and positive well-being and time management shows no significant relationship.

Though barriers surfaced during the implementation of distance learning, teachers find its ways to overcome it to cope with the challenges of the new normal. These help them meet the demands of the learning modality and being able to perform their duties and responsibilities as facilitators of learning to attain quality education despite this pandemic.

The following are the recommendations for this study:

1. The proposed intervention plan formulated should be utilized.

2. Teachers should formulate appropriate plans and implement adequate strategies to meet the demands of teaching and learning process in the new normal.

3. Teachers should have a growth mindset towards the situation, embrace changes and explore possibilities by getting out of their comfort zones.

4. The higher offices and school authorities may work with teachers in addressing the challenges they face as they mitigate to the new normal teaching practices.

5. Necessary resources and relevant trainings should be provided among teachers to successfully deliver quality education.

6. Engaging community and partnership to stakeholders should be enhanced by all school personnel to gain support in the implementation of distance learning; and

7. Future researchers should replicate this study to include different locale and include different variables aside from those mentioned in this study.

6. REFERENCES

[1] FlipScience. (2020). 'Tagapagdaloy': How Filipino parents can help ensure successful modular distance learning. FlipScience - Top Philippine Science News and Features for the Inquisitive Filipino. https://www.flipscience.ph/news/features-news/tagapagdaloymodular-distance-learning/

[2] Cos, F. L., Duero M. C., & Paguia, M. R. S. (2021). The viability of DepEd textbooks as the primary material for the modular distance learning modality of Carrascal National High School. Journal of Innovations in Teaching and Learning, 1(2), 69-75. http://www.sciepub.com/JITL/abstract/13265

[3] Manlangit, P., Paglumotan, A. M., & Sapera, S. C. (2020, October 5). Nanay, handa na ba kayong maging tagapagdaloy? Supercharging Filipino parents is key for successful modular distance learning. Flip Science. https://www.flipscience.ph/news/features news/tagapagdaloy-modular-distance-learning/

[4] Dangle, Y. R. P., & Sumaoang, J. D. (2020). The implementation of modular distance learning in the Philippine secondary public schools. In 3rd International Conference on Advanced Research in Teaching and Education, 100, 108. https://www.doi.org/10.33422/3rd.icate.2020.11.132

[5] Cardullo, V., Wang, C., Burton, M., & Dong, J. (2021). K-12 teachers' remote teaching self-efficacy during the pandemic. Journal of Research in Innovative Teaching and Learning, 4(1), 32-45. https://doi.org/10.1108/JRIT-10- 2020-0055

[6] Lagua, B. (2020, October 30). Teaching in the new normal. The Manila Times. https://www.manilatimes.net/2020/10/30/business/columnist s-business/teaching-in-the-new-normal/788762 [18] Llego, M. A. (2021). DepEd learning delivery modalities for school year 2020-2021. TeacherPH. https://www.teacherph.com/deped-learning-delivery-modalities/

[7] Abbas, K. D. A. (2021). Factors influencing students reading comprehension difficulties amidst the use of modular distance learning approach in Mindanao State University Sulu - Senior High School. Open Access Indonesia Journal of Social Sciences, 4(6), 447. https://doi.org/10.37275/oaijss.v4i2.78

[8] Cos, F. L., Duero M. C., & Paguia, M. R. S. (2021). The viability of DepEd textbooks as the primary material for the modular distance learning modality of Carrascal National High School. Journal of Innovations in Teaching and Learning, 1(2), 69-75. http://www.sciepub.com/JITL/abstract/13265

[9] Guiamalon, T. S., Alon, S. A. S., & Camsa, S. U. (2021). Teachers issues and concerns on the use of modular learning modality. International E-Journal of Advances in Social Sciences, 7(20), 457-469. http://dx.doi.org/10.46529/socioint.202115

[10] Tosun, N., Mihci, C., Bayzan, S. (2021). Challenges encountered by in-service K12 teachers at the beginning of the Covid-19 pandemic period: The case of Turkey. Participatory Educational Research, 8(4), 359-384. http://dx.doi.org/10.17275/per.21.95.8.4

[11] Pentang, J. T. (2021c). The concept of curriculum and its foundation. The Educator's Link, 1(6), 9. https://www.researchgate.net/publication/355953574_The_ Concept_of_Curriculum_and_its_Foundation

[12] Lapada, A. A. (2020). Audio-visual aided instruction in science among high school students in the Philippines. International Journal of Education and Research, 5(7), 139–156.

[13] Malipot, M. H. (2020). Teachers air problems on modular learning system. Manila Bulletin. https://mb.com.ph/2020/08/04/teachers-air-problems-on-modular-learning-system/

[14] Macaraeg, C. A., Barcelo, J. R., Reyes, D. N. G., Merculio, M. E., Bernardo, J. A., & Santos, M. D. (2021). Modular Distance Learning Expenses of Senior High School Teachers amidst the Pandemic.

[15] De Villa, J. A., & Manalo, F. K. B. (2020). Secondary teachers' preparation, challenges, and coping mechanism in the pre-implementation of distance learning in the new normal. IOER International Multidisciplinary Research Journal, 2(3), 144-154. http://dx.doi.org/10.5281/zenodo.4072845

[16] Moore, M. G. (2019) Editorial: Three types of interaction. American Journal of Distance Education, 3(2), 1-7. Retrieved from http://aris.teluq.uquebec.ca/ portals/598/t3_moore2019.pdf

[17] Hillman, D. C. A., Willis, D. J., & Gunawardena, C. N. (2019). Learner-interface interaction in distance education: An extension of contemporary models and strategies for practitioners. American Journal of Distance Education, 8(2), 30–42.

[18] Raagas, M. (2021). Challenges, Opportunities and Performance of Elementary Teachers in Times of Pandemic. International Journal of Advanced Multidisciplinary Studies. Volume 1, Issue 3, ISSN: 2782-893X

[19] De Villa, J. A., & Manalo, F. K. B. (2020). Secondary teachers' preparation, challenges, and coping mechanism in the pre-implementation of distance learning in the new normal. IOER International Multidisciplinary Research Journal, 2(3), 144-154. http://dx.doi.org/10.5281/zenodo.4072845

[20] Makabenta, S. (2021). Coping Mechanism to Address Challenges in the Implementation of Distance Learning. INTERNATIONAL JOURNAL OF ADVANCED MULTIDISCIPLINARY STUDIES, Volume 1, Issue 4, ISSN: 2782-893X, 2020

[21] Kankaew, K., Beltran, J. A., Khamidullina, Z., Magulod, G. C., Jr., Capulso, L. B., Cabacang, G. S., Anh, V. T., Vela, L. A. P., & Pentang, J. T. (2021). Immediate program learning outcomes of information technology candidates and their introspections towards IT education relevance and global competence initiatives. Psychology and Education Journal, 58(2), 5417-5427. http://www.psychologyandeducation.net/pae/index.php/pae/ article/view/2953

[22] De Souza, R., Parveen, R., Chupradit, S., Velasco, L. G., Arcinas, M., Tabuena, A. C., Pentang, J. T., & Ventayen, R. J. M. (2021). Language teachers' pedagogical orientations in integrating technology in the online classroom: Its effect on students motivation and engagement. Turkish Journal of Computer and Mathematics Education, 12(10), 5001-5014. https://turcomat.org/index.php/turkbilmat/article/view/5268

[23] Pentang, J. T. (2021b). Technological dimensions of globalization across organizations: Inferences for instruction and research. International Educational Scientific Research Journal, 7(7), 28-32. https://dx.doi.org/10.2139/ssrn.3896459

[24] Capulso, L. B., Magulod, G. C., Jr., Nisperos, J. N. S., Dela Cruz, J. M. M., Dizon, A. M., Ilagan, J. B., Salise, G. C., Vidal, C. J. E., Pentang, J. T., & Dugang, M. A. P. (2021). The teacher and the community, school culture and organizational leadership. Beyond Books Publication.