

Zooming Into Perspectives: High School Educators as They Adopt to In-person Education

Wealthia Hazel Y. Ramirez*, Meloddi Ciasih R. De Leon, Sean Gabriel S. Eligado,
Gabrielle Rose A. Ganiban, Gianne Chelsea A. Villa, Joseph A. Villarama
Central Luzon State University, Nueva Ecija, Philippines

*Corresponding Author Email: wealthiahazel.ramirez@ushs.ph.education

Date received: July 12, 2024

Date revised: July 28, 2024

Date accepted: August 3, 2024

Originality: 89%

Grammarly Score: 99%

Similarity: 11%

Recommended citation:

Ramirez, W.H., De Leon, M.C., Eligado, S.G., Ganiban, G.R., Villa, G.C., & Villarama, J.A. (2024). Zooming into perspectives: High school educators as they adopt to in-person education. *Journal of Interdisciplinary Perspectives*, 2(9), 170-175. <https://doi.org/10.69569/jip.2024.0350>

Abstract. As there are few studies regarding teachers' insights on online teaching, this study analyzed the adjustments of pandemic teachers shifting from online to in-person teaching methods to gain a deeper comprehension of the situations they experienced. This research conducted a descriptive qualitative case study following a researcher-designed, semi-structured interview with open and close-ended guide questions. Two participants were deduced to be the study participants, who were chosen through purposive sampling. Results revealed that the pandemic caused teachers' depression and anxiety. Online learning has many drawbacks, as adopting online learning adds more pressure on struggling teachers to balance commitments. Their personal and professional lives collided, hindering their teachers' effectiveness. Therefore, they learned to develop coping mechanisms to mitigate the stress. They also recognized the benefits of online learning and sought help to improve efficiency, as it helped them to see it from an alternate perspective. Despite the risks associated with COVID-19, they have shown resilience and dedication by positioning innovative teaching methods. As a preliminary exploration into the effects of the pandemic on the academic community, this study underscores continued research and support for educators and students. The commitment and passion demonstrated by these educators deserve recognition and celebration.

Keywords: Academic adjustments; Coping mechanism; COVID-19; In-person teaching; Online teaching.

1.0 Introduction

Millions of people have been affected by the infectious coronavirus disease 2019 (COVID-19) worldwide. The increasing prevalence of COVID-19 mandated one-to-two meter away social distancing regulations to reduce the number of people exposed to the virus (Rahayu et al., 2020). All socioeconomic aspects and institutions, especially the educational sector, were affected. Academic institutions transitioned to online platforms to maintain professional education amid the global emergency (Rose et al., 2020). When an unexpected occurrence happened, institutional adaptation capabilities were tested in the rush to transition to online education (Alnajjar et al., 2020). The global pandemic significantly influenced universities' way of teaching as they shut their facilities. At the same time, many nations closed any means of traveling in and out of their territories in response to lockdowns (Schleicher et al., 2020). Due to COVID-19, individuals must remain indoors, and students of all levels cannot physically go to school. All schools worldwide use virtual learning techniques to uphold high-quality education. Students who have used e-platforms as a means of literacy have contributed to the success of their studies (Villarama et al., 2023; Sheng et al., 2021). With this sudden change, the way of learning was modified not only for students but also for teachers in terms of changing the educational techniques for both students and teachers.

In-person and virtual teaching styles are significantly distinct from each other. Both the instructors and the students sensed the discrepancies. Teachers claim they impart knowledge and information, whereas students believe they earn it (Tsegay et al., 2022). Teachers changed their strategies to sustain a good quality education, and virtual learning was adopted immediately (Villarama et al., 2022; Wu et al., 2021). Transitioning to e-learning has increased the burden and stress on university faculty and staff, who were already struggling to juggle their commitments (Villarama et al., 2022; Botturi et al., 2020). With abrupt changes in how students are taught, “pandemic teachers” faced new obligations and working conditions. Teachers felt the pressure and psychological effects of these abrupt shifts as well (Villarama et al., 2023; Alvez et al., 2021). Even though herd immunity has been implemented, the virus is not entirely eradicated. There is a risk of contracting COVID-19 in the classroom, and teachers experience anxiety about infection and education. Thus, assessing the causes of teachers’ anxiety and devising the best methods for reducing it is a must to ensure children’s access to high-quality education. The global pandemic forced universities to embark on largely exploratory training immediately (Oliveira et al., 2021).

This research is grounded in the conceptual underpinnings of the Job Demands-Resources (JD-R) Model. The Job Demands-Resources (JD-R) model is a theoretical framework used to explain the relationship between job characteristics and employee well-being, job satisfaction, and work engagement. Personal resources such as self-efficacy, optimism, and resilience can help individuals cope with job demands and benefit from job resources, leading to higher levels of work engagement. Work engagement, in turn, can further enhance personal resources, creating a positive feedback loop. Further, the model suggests that job demands and resources are key factors affecting employee well-being and performance (Demerouti et al., 2019). This research examined how educators responded to global pandemic-related initiatives.

Numerous studies have been initiated on education throughout the global pandemic, with teachers serving as the prime data of experiences and knowledge. However, only a few have considered the effects of teachers’ stress and anxiety levels. This study focused on practical readiness among university instructors with little or no teaching experience. The study also looked at how teachers perceived significant events during their initial years of teaching during the pandemic. The primary goal of this investigation is to (1) analyze their adjustments and experiences as they underwent a quick change from online to traditional learning methods and (2) to gain a deeper comprehension of the circumstances they have encountered, which prior studies have overlooked.

2.0 Methodology

2.1 Research Design

A descriptive qualitative case study approach was employed, which enabled educational investigators to explore educational mechanisms and determine factors that affected school functions and outcomes for students and other educational actors. Additionally, descriptive qualitative research is a design with semi-structured interviews used to create questions that are more focused and relevant to the research question, developing supported interpretations (Olson, 2016; Saldana, 2021; Lungu, 2022). Particularly, the participants’ real-life experiences were considered part of the study’s analysis, in which their individual stories were imprinted. Understanding contemporary and complex social phenomena is one of the primary aims of case studies. Finding meaning in the factors influencing the participants’ dynamism during the pandemic was plausible.

2.2 Research Locale and Participants

This study was carried out at the Central Luzon State University Laboratory for Teaching and Learning-University Science High School (CLTL-USHS) in Science City of Muñoz, Nueva Ecija, Philippines, as it was one of the schools in Science City of Muñoz, Nueva Ecija that transitioned from online classes to face-to-face classes, amidst the pandemic. Moreover, when gathering participants, it is important to consider the participant’s observations within the framework of the study and notes regarding the environment in which the primary question takes place (Tomaszewski et al., 2020 & Asmawi et al., 2024). Thus, two (2) teachers from the CLTL-USHS participated in this study, who were selected purposively: (1) being newly employed at the selected educational institution during the COVID-19 pandemic; (2) having taught either specialist or general subjects in the first two quarters of the academic year 2022-2023; and (3) have transitioned from virtual to in-person teaching. Interviews were done in person at the participants’ respective offices. The two (2) gathered participants are the only ones eligible to join the study, as they are the best fit for interview and observation.

2.3 Research Instrument

The instrument used was a researcher-designed with open-ended and closed-ended semi-structured interview guide questions that were checked and reviewed by three professionals with expertise in Social Science, Psychology, and Educational Research.

2.4 Data Gathering Procedures

Data was collected using a semi-structured interview. An interview guide with closed- and open-ended questions was used in the study to facilitate efficient and prompt data collection. Participants provided their consent for the interview. The field notes and audio/video recording device was used to document the process, which lasted an hour for each interview.

2.5 Data Analysis

Data were analyzed using a six-phase thematic analysis: (1) transcription, (2) theme development, (3) indexing, (4) charting, (5) mapping, and (6) interpretation of data (Labra et al., 2020 & Rajashekar et al., 2023). The responses in audio and video recordings documenting individual interviews were watched and listened to several times, while transcriptions were read several times to comprehend their varied perspectives. The interview was transcribed verbatim, and codes were created for the concepts pertinent to the study. Line-by-line coding was used to identify the thematic framework and develop the themes, which were then integrated into the subcategories through ongoing concept comparison, modification, and analysis. When patterns were found in participants' concepts and inferences, they were compared, contrasted, and interpreted as part of the charting, mapping, and interpreting process. The entire response from each interviewee was included in the interview transcription to eliminate any ambiguity as to the purpose of the data collection (Labra et al., 2020).

2.6 Ethical Consideration

The study followed all ethical procedures prescribed by the Central Luzon State University (CLSU) Ethics Research Committee (ERC), with ethics approval code 2023-157 on March 14, 2023.

3.0 Results and Discussion

3.1 Coping Strategies

Not just the students but also teachers were suffering from mental health difficulties such as depression and anxiety because of the pandemic. When confronted with stressful events, coping strategies are crucial in tolerating and diminishing negative emotions. The two respondents discussed how they coped throughout the days of lessons taken online.

Time management

Effective time management prevents overworking and enables you to balance your personal and professional responsibilities. The respondents claimed that by effectively managing their time, they could complete their tasks and still find time for relaxation.

"I managed time by doing modules and checking outputs."

A study about the preparation, challenges, and coping mechanisms in the pre-implementation of distance learning in the new normal stated that teachers with established routines through habits and practices in a set timetable helped make the best use of their time (Santos et al., 2022; De Villa et al., 2020).

Peer Mentoring

Respondents mentioned that they greatly appreciate the support and help they got from their co-workers. The holistic growth and well-being of instructors are strongly supported by guidance. They also added that they felt excited and happy to teach their subject again face-to-face after hearing the news of blended learning.

"By seeking help from my co-teachers, I managed time in doing modules and checking outputs."

"I was very excited because this is the first time that I am going to teach my subjects in face-to-face."

Most teachers prefer to have activities to create or maintain relationships with other people (Andrade et al., 2022). Similarly, teachers see the assistance they may provide one another as a valuable way to stay connected (De Villa et al., 2020).

3.2 Personal and Professional Obstacles

In online and in-person classes, the teachers encountered numerous difficulties in their personal and professional lives. Their ability as teachers and students' ability to study online was questioned.

Pedagogical and Instructional Challenges

They were worried about the quality of education the students were receiving, but they were also concerned about how the absence of in-person instruction would affect their students' evaluations. Teachers who participated in the study perceived the sudden shift to distance learning/teaching as difficult, as they or their colleagues had to quickly learn new technologies and adapt to the digitalization of pedagogical design. They felt guilty for not being able to provide the students with the education they needed because of the lack of communication and engagement. Modular learning also posed a struggle for them due to the difficulty in preparing learning materials.

"There are other parents who say that this is the grade that was given to such and such. It is not my experience, but I am just sharing. Why is this person giving a grade like this when he/she did not teach? So, it is like on that particular statement; we are a little hurt because we do not have control over the pandemic and its effects."

The shift to remote learning has presented challenges in maintaining student engagement and motivation. Teachers have reported difficulties fostering community and collaboration among students and providing individualized support to meet their diverse learning needs (Suhardi et al., 2023; Goudeau, 2021).

Work-Life Balance

The teachers had trouble organizing and balancing their personal and professional responsibilities. They found it challenging to teach students in in-person and online learning environments because of their tasks. They were frequently less efficient because of household duties such as parental and spouse responsibilities. They were concerned they would not have enough time to prepare their materials and cater to their family. They even occasionally had to forsake some responsibilities because of conflicting schedules. The teachers were also concerned that their pay did not match the amount of work they were putting in and that it was insufficient. The transition to in-person teaching also made them question their safety and the hostile nature of their workplace.

"As we already settled in CLSU village here in CLSU, during the pandemic, there were times that my two toddlers needed to travel to sleep because I had to work at San Jose National High School. These situations were particularly difficult for them because they had to come with me."

During the pandemic, employees with children have reported difficulties managing their work responsibilities and parenting duties. The sudden shift to remote instruction has required additional support for their children during the day while managing their obligations, leading to an imbalance in work and home life (Backhaus et al., 2023).

The sudden shift to remote instruction has blurred the boundaries between work and personal life for teachers, making it challenging to maintain a healthy work-life balance. Teachers have reported difficulty managing their time, with many working longer hours to compensate for the lack of in-person instruction (González-Ramírez et al., 2020).

3.3 Advantages of Online Learning

Teachers were obliged to conduct online classes during the pandemic for safety purposes. However, as the spread of COVID-19 decreased, the transition from online to face-to-face classes surfaced. Despite the sudden transition, teachers were able to prepare for it. However, many people now recognize the advantages of online classes, including convenience. According to respondents, online classes also have positive aspects.

"When it comes to online classes, it is not all about negativity; there is positivity, too. Of course, that is the convenience of conducting online classes."

"The online class is exciting, especially when it is asynchronous. I learned a lot, especially by using different applications and the Internet."

Everything has its advantages and disadvantages, which also applies to e-learning. Due to the global pandemic, teachers shifted from in-person to virtual teaching to sustain quality education (Villarama et al., 2024; Wu et al., 2021). However, the sudden transition to e-learning has increased the burden and stress on university faculty and staff, who were already struggling to juggle their commitments (Botturi et al., 2020). Nevertheless, teachers acknowledged that learning online was more enjoyable and practical (Estrellan et al., 2021). Similarly, teachers experienced disadvantages during online teaching or e-learning that gave them many advantages such as (money-saving, convenience, and flexibility). Aside from the convenience, flexibility, and cheaper cost of online teaching, teachers stated that it helped them boost their confidence, explore and employ novel teaching approaches (Villarama et al., 2024; Suhardi et al., 2023), and improve their skills as teachers by becoming more technically adept (Nambiar, 2020).

4.0 Conclusion

The contagious coronavirus disease 2019 (COVID-19) has impacted millions worldwide. Regulations requiring social separation of one to two meters are necessary to reduce the number of persons exposed (Rahayu et al., 2020). The closing of institutions was also affected. Learners and instructors must adapt immediately to a new modular setting (Rose et al., 2020). As they found themselves in a new educational environment, the shift to e-learning added pressure and stress on university teachers and staff, who were already struggling to combine their other commitments.

Participants in this study expressed their thoughts as they adjusted to their new roles as online lecturers. So, while working in an online environment, they were concerned about their pupils' learning efficiency. Further, they considered offline training more efficient than online schooling (Alcontin, 2021). Teachers also began to assess themselves if they were even competent in their professions. To ease these negative emotions, they sought help from their colleagues and stayed positive. Thus, certain discussions suggested that, while they were initially cautious and unsure of the approach, they gradually recognized the benefits of online education (Alnajjar et al., 2020).

With the lingering threat of COVID-19 in the classroom, teachers have demonstrated remarkable resilience and dedication in their return to traditional teaching methods. Though they may have been anxious about the risks associated with in-person instruction, their enthusiasm, and eagerness to reconnect with their students and return to their regular setting prevailed. Despite the ongoing challenges presented by the pandemic, teachers continue to play a vital role in the education and development of their students, and their commitment and passion should be celebrated and recognized. In navigating these uncertain times, it is important to support and appreciate the hard work and sacrifices of educators, who have repeatedly demonstrated their unwavering commitment to the success and well-being of their students.

Through this research, it has been revealed that newly hired instructors have faced a multitude of challenges and unique pressures during the COVID-19 pandemic. In attempting to understand teachers' coping techniques, the researchers have gained insight into their personal experiences, finding that they have much in common with their teachers. However, these instructors have faced these challenges while juggling other responsibilities, such as household tasks, making their situation even more difficult. The findings of this research highlight the need for continued support and resources for educators, particularly those new to the profession and navigating unprecedented circumstances.

The findings of this research provide valuable insight into the experiences of academic faculty members during the COVID-19 pandemic. However, to expand the understanding of this topic further, it is recommended that other scholars also delve into this field. While this study focuses on a specific institute, a larger population and setting could provide a broader perspective. In addition, future longitudinal studies are necessary to determine the long-term effects of online instruction on faculty members' professional behavior and career growth. Data source triangulation is also advised to ensure the validity and reliability of the data. By incorporating various data sources, such as time, space, and people, researchers can enhance the accuracy and comprehensiveness of their

findings. Ultimately, this research serves as a starting point for a larger conversation about the impact of the pandemic on the academic community and highlights the need for continued research and support for educators.

5.0 Contributions of Authors

The authors indicate equal contribution to each section of this research article. The authors reviewed and approved the final work. The following are the contributions of each author: Abstract & Keywords-WHYRamirez & MCRDeLeon; Introduction-WHYRamirez, MCRDeLeon, SGSEligado, GRAGaniban, GCAVila; Methodology-Research Design-SGSEligado, GRAGaniban, Research Locale and Participants-WHYRamirez, Research Instrument-WHYRamirez, SGSEligado & JAVillarama, Data Gathering Procedures-MCRDeLeon, SGSEligado, GRAGaniban, WHYRamirez, GCAVila, Data Analysis-MCRDeLeon, SGSEligado, GRAGaniban, WHYRamirez, GCAVila & JAVillarama; Ethics-MCRDeLeon, SGSEligado, GRAGaniban, WHYRamirez, GCAVila & JAVillarama; Results and Discussion-JAVillarama, MCRDeLeon, WHYRamirez, GRAGaniban, SGSEligado, GCAVila; and Revisions-WHYRamirez & JAVillarama.

6.0 Funding

This work received no specific grant from any funding agency.

7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

8.0 Acknowledgement

The researchers would like to thank their adviser and co-author sincerely, Asst. Prof. Joseph A. Villarama, for sharing his knowledge and insightful recommendations at every level of the project, which contributed substantially to the enhancement of the research. The researchers are also thankful to all those with whom they had the pleasure to work throughout the journey and their parents/guardians for their love and guidance.

9.0 References

- Alcontin, T. N. (2021). Philippines teachers' beliefs on digital teaching competence in post-pandemic recovery: Still prefer online? *Journal of Educational Management and Instruction*, 1(2), 71-82. <https://doi.org/10.22515/jemin.v1i2.4287>
- Alnajjar, H., Asif, U., Bano, N., Alshammari, F., and Khan, M.A. (2020). Faculty experiences with emergency transition to online teaching amid COVID-19 pandemic in a health science university. *La Prensa Medica Argentina*, 106(2), 1-5. <https://doi.org/10.47275/0032-745x-s2-024>
- Amiti, F. (2020). Synchronous and asynchronous e-learning. *European Journal of Open Education and E-Learning Studies*, 5(2), 60-70. <https://doi.org/10.46827/ejoe.v5i2.3313>
- Asmawi, A., & Alam, M. S. (2024). Qualitative research: understanding its underlying philosophies. *Forum for Education Studies*, 2(2), 1-14. <https://doi.org/10.59400/fes.v2i2.1320>
- Backhaus, I., Hoven, H., Bamba, C., Oksanen, T., Rigó, M., Di Tecco, C., Iavicoli, S., & Dragano, N. (2023). Changes in work-related stressors before and during the COVID-19 pandemic: Differences by gender and parental status. *International Archives of Occupational and Environmental Health*, 96(3), 421-431. <https://doi.org/10.1007/s00420-022-01933-w>
- Corbin, C. M., Alamos, P., Lowenstein, A. E., Downer, J. T., & Brown, J. L. (2019). The role of teacher-student relationships in predicting teachers' personal accomplishment and emotional exhaustion. *Journal of School Psychology*, 77, 1-12. <https://doi.org/10.1016/j.jsp.2019.10.001>
- Estrellan, A., Ferrariz, K. J., Lazona, P. A., Madres, V. E., & Estrellan, J. C. (2021). E-learning amidst the pandemic: Teachers' perspective in the Philippines. *ASEAN Journal of Science and Engineering Education*, 1(2), 93-96. <https://doi.org/10.17509/ajsee.v1i2.33384>
- Goudeau, S., Sanrey, C., Stanczak, A., Manstead, A., & Darnon, C. (2021). Why lockdown and distance learning during the COVID-19 pandemic are likely to increase the social class achievement gap. *Nature Human Behaviour*, 5(10), 1273-1281. <https://doi.org/10.1038/s41562-021-01212-7>
- Jackaria, P. M. (2022). Elementary teachers' experiences and instructional challenges during the return to school after the COVID-19 closure in the Philippines. *Zenodo (CERN European Organization for Nuclear Research)*, 2(2), 216-225. <https://doi.org/10.5281/zenodo.6955920>
- Labra, O., Castro, C., Wright, R., & Chamblas, I. (2020a). Thematic Analysis in Social Work: A Case Study. In *IntechOpen eBooks*.
- Lungu, M. (2022). The Coding Manual for Qualitative Researchers. *American Journal of Qualitative Research*, 6(1), 232-237. <https://doi.org/10.29333/ajqr/12085>
- Nambiar, D. (2020). The impact of online learning during COVID-19: students' and teachers' perspective. *International Journal of Indian Psychology*, 8(2), 783-793. <https://doi.org/10.25215/0802.094>
- Oliveira, G., Grenha Teixeira, J., Torres, A., & Morais, C. (2021). An exploratory study on the emergency remote education experience of higher education students and teachers during the COVID-19 pandemic. *British Journal of Educational Technology: Journal of the Council for Educational Technology*, 52(4), 1357-1376. <https://doi.org/10.1111/bjet.13112>
- Olson, K. (2016). Essentials of qualitative interviewing. In *Routledge eBooks*.
- Orlanda-Ventayen, C. C., & Ventayen, R. J. M. (2021). Stress and depression in the workplace of educators in the Philippines. *medRxiv (Cold Spring Harbor Laboratory)*. <https://doi.org/10.1101/2021.04.22.21254017>
- Platto, S., Xue, T., & Carafoli, E. (2020). COVID19: an announced pandemic. *Cell Death & Disease*, 11(9), 799. <https://doi.org/10.1038/s41419-020-02995-9>
- Pokhrel, S., & Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133-141. <https://doi.org/10.1177/2347631120983481>
- Rahayu, R. P., & Wirza, Y. (2020). Teachers' perception of online learning during pandemic Covid-19. *Jurnal Penelitian Pendidikan*, 20(3), 392-406. <https://doi.org/10.17509/jpp.v20i3.29226>
- Rajashekar, S., & Jain, A. (2023). A Thematic Analysis on "Employee Engagement in IT Companies from the Perspective of Holistic Well-being Initiatives." *Employee Responsibilities and Rights Journal*, 36(2), 165-187. <https://doi.org/10.1007/s10672-023-09440-x>
- Roblyer, M. D., Porter, M., Bielefeldt, T., & Donaldson, M. B. (2009). "teaching online made me a better teacher." *Journal of Computing in Teacher Education*, 25(4), 121-126. <https://doi.org/10.1080/10402454.2009.10784620>
- Rose, S. (2020). Medical student education in the time of COVID-19. *JAMA: The Journal of the American Medical Association*, 323(21), 2131-2132. <https://doi.org/10.1001/jama.2020.5227>
- Saldaña, J. (2021). The Coding Manual for Qualitative Researchers (4th ed.). SAGE Publications Ltd.
- Santos, J. P. E., Villarama, J. A., Adsuara, J. P., Gundran, J. F., De Guzman, A. G., & Ben, E. M. (2022). Students' time management, academic procrastination, and performance during online science and mathematics classes. *International Journal of Learning, Teaching and Educational Research*, 21(12), 142-161. <https://doi.org/10.26803/ijlter.21.12.8>
- Schleicher, A. (2020). The Impact of COVID-19 on Education: Insights from "Education at a Glance 2020". OECD Publishing.
- Suhardi, N. A., Muliati, A., Sakir, G., & Villarama, J. A. (2023). Increasing Students' Vocabulary Using Fairy Tales at SMKN 6 Makassar. *Journal of Language Learning and Assessment*, 1(2), 73-80. <http://e-journal.naifaderu.org/index.php/jlla/article/view/101>
- Tomaszewski, L. E., Zarestky, J., & Gonzalez, E. (2020). Planning Qualitative research: design and decision making for new researchers. *International Journal of Qualitative Methods*, 19, 160940692096717. <https://doi.org/10.1177/1609406920967174>
- Tsegay, S. M., Ashraf, M. A., Perveen, S., & Zegerish, M. Z. (2022). Online teaching during COVID-19 pandemic: Teachers' experiences from a Chinese university. *Sustainability*, 14(1), 568. <https://doi.org/10.3390/su14010568>
- Villarama, J. A., Barcelita, K. J. C., Pilién, R. V., & Crisanto, W. A. V. (2024). Padlet: Post-Pandemic Avenue For A More Dynamic Language And Literature Learning Through Enhanced Technology Integration. *Issues in Language Studies*, 13(1), 304-321. <https://doi.org/10.33736/ils.6149.2024>
- Villarama, J. A., Fabros, B. G., Valdez, M. S., & Adsuara, J. P. (2023). Multitasking language and Mathematics educators: Effects on teaching performance in Hyflex environ. *International Journal of Learner Diversity and Identities*, 30(2), 455-471. <https://ijldi-cgrn.com/wp-content/uploads/2023-30-2-46.pdf>
- Villarama, J. A., Santos, J. P. E., Adsuara, J. P., Antalan, J. A. R., & Gundran, J. F. (2022). What's on Your Mind? Impact of Online Education on Students' Mental Wellness. *Journal of Education and e-Learning Research*, 9(4), 240-248. <http://doi.org/10.20448/jeelr.v9i4.4243>
- Villarama, J. A., Santos, J. P. E., Adsuara, J. P., Gundran, J. F., & Castillo, M. E. G. C. (2022). Through the lens of virtual students: Challenges and opportunities. *International Journal of Learning, Teaching and Educational Research*, 21(10), 109-138. <https://doi.org/10.26803/ijlter.21.10.6>
- Wu, S.-Y. (2021). How teachers conduct online teaching during the COVID-19 pandemic: A case study of Taiwan. *Frontiers in Education*, 6. <https://doi.org/10.3389/feduc.2021.675434>
- Zhou, J., Yuan, X., Huang, H., Li, Y., Yu, H., Chen, X., & Luo, J. (2021). The prevalence and correlative factors of depression among Chinese teachers during the COVID-19 outbreak. *Frontiers in Psychiatry*, 12, 644276. <https://doi.org/10.3389/fpsyt.2021.644276>