

CHALLENGES FACED BY INSTRUCTORS AGED 50s AND BEYOND IN THE NEW NORMAL

Authors Name: ¹Arnold d. Lumanlan, ²Ruby T.Galang, ³Michael Angelo F. Bacani, ⁴Joan N. Puebla, ⁵Maricel S. Supan

Affiliation: Don Honorio University, Bacolor, Pampanga, Philippines

Email: adlumanlan@dhvsu.edu.ph

DOI No. – 08.2020-25662434

Abstract

In the onset of pandemic, higher education institutions adapted the new normal set-up, implementing the virtual classes thus, the most affected are instructors 50's and beyond. This study explored the challenges faced by 10 participants, made used of phenomonological research design and purposive sampling for the participants. Thematic analysis was employed in the intrepretation of data. Results revealed that health concern , ICT skills, technical assistance , and poor internet connctivity were the challenges met in the new normal set-up. Recommendations such as more webinar workshop regarding technology skills should be designed for older instrcutors 50's and beyond.

Keywords: 50's and beyond, ICT skills, internet connectivity,

INTRODUCTION

Some people are working harder than ever, while others have lost their jobs, while others can only work from home, and while still others have been forced to redesign their work methods in response to the Covid-19 epidemic. 2020 (Kniffin et al.). Employees in their 50s may be much more impacted by the pandemic than younger workers, since they are classified as vulnerable and at risk under Covid-19. As unemployment rates continue to rise, employees over the age of 50 are worried about age discrimination. According to study conducted by the American Association of Retired Persons (AARRP), older employees are more susceptible to layoffs during times of economic instability and have a harder time being rehired at prior pay when displaced. As seen by current employment statistics, the coronavirus is wreaking havoc on workers of all ages. Nearly 10 million individuals claimed for unemployment benefits in the last two weeks of March. The epidemic of COVID-19 altered many facets of the world, including how elderly people are treated. We think that research data from the behavioral sciences of aging may assist in addressing the epidemic in ways that promote the health and well-being of persons throughout their lives. 2020 (Ayalon et al.).

As older adults are portrayed as susceptible to the negative effects of the COVID-19 outbreak, younger people tend to view themselves as immune to the virus and, thus, engage in risk behaviors with consequences that ultimately will need to be addressed by an already stressed health care system. The growing division between young and old also allows younger people to direct their anger and resentment about the situation towards older adults, who are clearly portrayed as the out group. In the future, this age division and negative portrayal of older adults and aging may affect younger people's aging process as they too internalize negative messages about old age and aging in the context of the current pandemic (Levy, 2009).

To overcome this epidemic collectively, there is an urgent need for increased global and national

cooperation, as well as the participation of all sections of society, particularly older adults" (Guterres 2020). They were often expected to withdraw from arguments about the prioritizing of limited critical care resources in favor of the future and younger generations (Gandhi and Patel 2020).

On a public health level, several critics claimed that isolating vulnerable individuals such as seniors would be a more effective and less detrimental policy option for keeping the economy functioning (Kulldorf et al. 2020). A few national governments have really prioritized acquiring herd immunity, enabling the younger population to continue living their normal lives while segregating the elderly (Kay and Sakarya 2020). The Regional Director of the World Health Organization (WHO) for Europe asked the public to "act in solidarity" and to "help and safeguard older people" (Kluge 2020).

Teachers' capacity to convey information has a substantial impact on pupils' academic progress (Alufohai & Ibhafidon, 2015). Numerous studies have shown that teacher characteristics such as age and teaching experience have an influence on teacher effectiveness. Zafer and Aslihan (2012) discovered that senior instructors (41 years and older) are more effective teachers and had superior classroom management abilities than younger high school teachers. Aloka and Bojuwoye (2013) discovered that younger instructors often make riskier judgments and do not thoroughly assess the context while dealing with students' disciplinary issues owing to a lack of experience and immaturity in comparison to older teachers. The conclusion is consistent with a subsequent research by Nyagah and Gathumbi (2017), who discovered that older instructors were more likely to boost pupils' learning than middle-aged and younger teachers in a cross-sectional survey in Kenya.

Teachers' expertise might be regarded adequately while determining the most fundamental tenets of a school system. Teachers' knowledge and experience will influence their delivery of lessons and their use of pedagogies in instructional teaching and learning. (2017) (Mishra & Mehta). Technology integration into educational materials has the potential to significantly enhance teaching and learning (Doolittle & Hicks, 2003). To successfully integrate ICT into T&L, educators must first acquire the necessary knowledge and skills (Garba, Byabazaire, & Busthami, 2015).

Teaching is becoming one of the most difficult professions to enter (Perraton, Robinson, & Creed, 2001) as a result of the growth of information and the need to acquire new technologies for use in the teaching-learning process (Robinson & Latchem, 2003). ICT may give teachers with more adaptable and effective means or procedures for professional development in order to retain their employment (Carlson & Gadio, 2002), enhance their competences, and link them to the global teacher community (Jung, 2005). ICT strives to enhance instructors' and students' performance, hence increasing the efficacy and efficiency of the teaching-learning process. Teachers at the elementary, secondary, and postsecondary levels are being taught in practically every country in the Asia Pacific area to utilize ICT in education to varied degrees and scopes (UNESCO, 2003). The significance of ICT enhances the learning process, aids in the organization and administration of educational institutions, and pervades all spheres of economic and social life. However, adaption of ICT is only achievable with a firm grasp of its fundamental ideas and concepts. These advancements are occurring at a breakneck pace, and their implications must be considered while developing ICT curriculum (UNESCO, 2002).

Malaysian teachers have a high level of ICT competency and confidence, which means they are capable of effectively integrating ICT tools into their teaching processes, such as using computers, creating slides to present their lessons, searching the internet for updated information, and designing simple

web sites. This instrument equips students with appropriate information about ICT, which in turn fulfills and motivates them (Tasir, Abour, Halim & Harun, 2012). "Teachers do not do well in a blended learning environment," according to a study on online learning. Due to instructors' inability or unwillingness to teach online, blended learning is not their preferred mode of education. This dismay and unhappiness permeate the educational system (Dziuban et al., 2018).

A study of instructors' stress levels while using technology reveals an increase in teachers' anxiety levels now that the new learning model has shifted to online forms. Numerous teachers who are not members of the "Millennial" or "Gen Z" generations are more likely to face stress, according to studies (Al-Fudail & Mellar, 2008). Almost nine out of ten teachers state that they are very concerned and scared as a consequence of the pandemic's transformation. Additionally, the poll found that 81% of educators questioned work more than 14 hours each day to fulfill their professional responsibilities (Schaffhauser, 2020).

Teachers reported challenges providing teaching materials that were acceptable for students of all abilities, establishing approaches that were appropriate for all students, and organizing synchronous sessions. (2021, Izhar). Izhar 2021 reports that instructors claimed that online teaching and learning imposed a time constraint on them. Additionally, the instructor admitted that he or she always spent an extra two to three hours preparing the materials.

When the teacher is capable of communicating with students and completing the online task, an ideal online teaching and learning session occurs. Communication self-efficacy is defined in this study as a teacher's ability to communicate effectively through writing, video/audio, conducting synchronous or asynchronous lessons, and how a teacher utilizes available online applications such as Google Classroom for LMS or social media platforms such as Whatsapp and Telegram for effective communication in online T&L. (2019).

Additionally, instructors lack confidence when communicating with students in online teaching and learning environments, since they often use online platforms for social interaction. Teacher 54 attributed her lack of confidence to her advanced age, adding that she is "unconfident as a member of the elder generation." 2021) (Izhar et al.

As the unemployment rate continues to grow, workers over the age of 50 are concerned about age discrimination. According to studies conducted by The American Association of Retired Persons, older workers are more prone to layoffs during periods of economic turbulence and have a harder difficulty getting rehired at previous wages when relocated. 2020 (Alwin et al.).

According to Ayalon et al., 2020, older workers aged 50 and over may be much more affected by the pandemic than younger workers, since they are designated as vulnerable and at risk under Covid-19. Both teachers and technology play critical roles in education. Together, effective instructors and cutting-edge technology are critical for educational advancement. Numerous research have been conducted to determine the teacher's effect on ICT integration. (Becta, 2004; Chen, 2008; Egbert, Paulus, & Nakamichi, 2002; Hubbard, 2008; Mumtaz, 2000; Park & Son, 2009; Russell & Bradley, 1997; Russell & Bradley, 1997; Russell & Bradley, 1997). These research showed that instructors play a critical role in integrating ICT into language instruction and learning. Numerous teacher-related

variables influence the incorporation of ICT. Some of these determinants include the instructors' age (Teo, 2008; Yaghi, 2001), experience (Egbert, Paulus, and Nakamichi 2002; Russell and Bradley 1997), and gender (Russel & Bradley, 1997; Todman 2000).

These research established the critical role of human factors in ICT integration. For example, Becta (2004) finds that teachers' degree of confidence in utilizing technology is a major predictor of their level of participation in ICT. Chen (2008) argues that ongoing professional development is necessary to ensure the effective and successful deployment of Internet-based language training. Mumtaz (2000) summarizes many research and finds that effective ICT integration requires addressing three interwoven frameworks for change: the teacher, the school, and policymakers.

Prior to that, a generalization on how the changes are affecting instructors aged 50 and above or education and how they may effect the target participants. Additionally, this research attempts to discover educators' coping mechanisms in connection to prospective programs that may be developed to assist educators in performing their tasks and obligations.

OBJECTIVES

The study aimed to describe the challenges faced by instructors beyond 50s in the new normal. Specifically, it sought to answer the following questions;

1. How may the participants be described in terms of:
 - 1.1 Gender
 - 1.2 Teaching Assignment
 - 1.3 Length of Service
 - 1.4 Academic Rank
 - 1.5 Other Curricular Designations
 - 1.6 ICT skills?
2. What are the challenges met by the participants in an online class?
3. What mechanism was adopted by the participants to cope with these challenges?
4. What programs could be made to assist the participants in the new normal?

METHOD

Research Design: This study made used of a phenomenological method as its research strategy. It provided explanation of the difficulties encountered by teachers beyond the 50s in the new normal. It provided a record of life experiences. It is clearly idiographic in its duty to look at the particular experience of each instance in turn, before the shift to more general situations and claims (Smith & Osborn, 2015). (Smith & Osborn, 2015). The techniques of phenomenological investigation articulated the meaning of experienced experiences, 'to get to the objects themselves, rather than quantify them (Martin,2017).

Respondents and Sampling Method: The study's participants were 10 instructors aged 50s and beyond from various university departments, who were chosen through purposive sampling. Purposeful sampling was frequently used in qualitative research to identify and select cases that contain significant amounts of information about the phenomenon of interest. Instructors who were 50s and beyond and has 5 years in the service were the target participants of this study. Along with knowledge and experience, combining sampling strategies, on the other hand, was more appropriate

for implementation research's objectives and more consistent with recent advances in quantitative methods. Purposeful sampling is a method commonly used in qualitative research for identifying and selecting instances with a lot of information in order to make the most use of few resources (Patton, 2002).

Instrument: The study used open-ended questionnaires to get participants' feedback on the study. The constructed instrument validated by the experts in the university was then, utilized in the interview process. Qualitative studies that employ open-ended questions enable researchers to take a holistic and comprehensive look at the issues under investigation because open-ended responses allow respondents to provide more options and opinions, resulting in more diversity in the data than would be possible with a closed-question or forced-choice survey measure. According to Warren (2020), qualitative data is often derived through interview transcripts, papers, and open-ended survey responses. The researchers will collect data for this study via interviews and open ended questionnaires. Thus, after collecting data from participants, the researcher will begin analyzing and observing their responses.

Data Collection: The researchers began the interview by outlining the project's objective and giving a thorough explanation. The researchers identified themselves as university researchers who work as teachers. No one was questioned unless they had given their permission. An interview was arranged depending on the availability and convenience of the participants using the open ended questionnaires. The real one-on-one, in-depth interview, which will last about 30 minutes, was conducted through Google Meet. With the participants' permission, the discussions were recorded. The recorded interviews were verbatim transcribed. According to Bolderston (2012), an online interview is a kind of remote interview that uses the computer as a methodological instrument for study. According to another research, emergent is fueled by technical innovation rather than paradigmatic viewpoint (Hesse-Biber & Leavy, 2010). Interviews will take place at the participant's most convenient time, away from interruptions and in complete secrecy.

Data Analysis: Calzon defines data analysis as the process of compiling and analyzing data (2021). The researchers evaluated, interpreted, and transcribed the data in accordance with the structured interview questions asked by participants. Transcribed data allows for the recording of participant answers using the qualitative approach. According to Warren (2020), qualitative data are often derived through interview transcripts, publications, and open-ended sample responses. The researchers collected data for this study by interviewing participants. The data collected was analyzed using thematic analysis. Thematic analysis is one of the most well-known qualitative analysis methods, according to Crosley (2021). A Focus Group Discussion was employed among the participants to show unbiased findings and interpretations of the study.

Ethical Considerations: The study adhered to the five basic ethical principles which are the avoidance of harm, avoidance of deception, respect to privacy, the practice of confidentiality and the notion of informed consent. Particularly, the anonymity and confidentiality of the informant's personal information was considered in this study. Proper consent will be conducted to informants before the one on one actual interview. Informant's convenient time and place preference was also considered. In addition, ethical consideration was also parallel to the policy and guidelines of RA 10173 or the Data Privacy Law of 2012 that protects individuals from unauthorized processing of personal information

that is private, not publicly available; and identifiable, where the identity of the individual is apparent either through direct attribution or when put together with other available information.

RESULTS AND DISCUSSION

The results and discussion are sequenced following the objective of the study.

1. Participants' Description: The participants comprised of 3 male and 5 female instructors, assigned from the different departments in the university. The participants had rendered years of service to the university with range of 8- 28 years. They hold an academic rank from instructor 1 to Associate Professor V. Aside from their academic assignments, they are engaged in other curricular designations such as coordinators and faculty organization positions. In terms of their ICT capability, the participants displays basic to advanced skills in using WORD and Power Point and other related technology applications.

2. Challenges met by participants in an online class

2.1 Eye Health Problems or Vision Health Problems: The internet, mobile phones, social networking sites, and texting have altered our perspective on the world. There are 6.9 billion mobile phone users, almost as many as there are people on the planet. Individuals who use electronic devices excessively get musculoskeletal issues. Repetitive strain injury is a chronic condition caused by repeated, forceful, or awkward hand movements over an extended period. This results in damage to the muscles, tendons, and nerves of the neck, shoulder, forearm, and hand, resulting in pain, weakness, numbness, or impaired motor control. Prolonged usage of electronic devices has an adverse effect on the eyes, neck muscles, arm, and wrist. The participants revealed their concern in an online learning. (Sarla, G.S, 2019). I have difficulty on long exposure to the laptop screen, eye strain, numb buttocks, strained legs. (P1). My eyes become reddish when there is a too much exposure in conducting an online class. (P 3)

2.2 Poor Internet connectivity and technical support: The one of the biggest challenges to address the problem regarding learning is the availability of technological gadgets and internet connectivity. There were pieces of literature that supported the argument of this study and saw the needs and challenges of internet connections among students (Lorenzo, 2017). The participants address this kind of difficulty in online class.

P 2, P5, P7 and P8 stated that the “poor internet connection is our main problem whenever we conduct synchronous classes.

I have unstable internet connection; limited knowledge in using the computer; dependent to my loved ones in using the computer. (P9).

2.3 Academic Honesty: Academic Honesty” means performing all academic work without plagiarism, cheating, lying, tampering, stealing, receiving unauthorized or illegitimate assistance from any other person, or using any source of information that is not common knowledge. (West hills college, 2022) Participants admitted that there are students who are dishonest in their classes.

It's not easy to give exam especially we didn't see them answering their works. Sometimes, I saw that their answers in an essay were the same. (P6).

It was obvious that some of my students were copying with each other during quiz. (P1).

2.4 Inadequate laboratory: Access to and tailored training necessary for laboratory education may

be severely harmed during times of regulatory restraints, like as the COVID-19 epidemic, or resource scarcity. This has a direct effect on the level of student involvement and immersion required for conceptual and procedural comprehension in scientific investigation. While online and remote labs have the potential to solve the aforementioned difficulties, theoretical views on laboratory learning outcomes are crucial for maximizing their influence and are currently under-researched. (Achuthan, K., Raghavan, D., Shankar, B. et al., 2021). Two participants address the challenges of their student in their classes.

P4 and P5 said” Our students find difficulty on their laboratory specially the grade 11”.

3. Mechanism adopted to cope with these challenges

3.1 Teachability: To be teachable is to develop an attitude of learning, observing, listening, and asking when you need help. It’s an attitude that recognizes that you’re human, that you make mistakes, and that it can be hard to see them from your own perspective. Besides the workplace benefits, there are key benefits that being a teachable person bring to your life. When you are teachable, you want to learn and you are more open to others, whether they are sharing information or their experience or their point of view. When you are teachable, you acknowledge your limitations. You can use them as a springboard to grow and develop your character, and to find new opportunities. Most importantly, by being open to others, accountable to yourself, learning, and growing your skills and knowledge, you are investing in yourself. Most of the participants adopted this kind of attitude for them cope with the abovementioned challenges. (Yacharn, 2020)

Learning and ask others assistance. (Participant # 6)

I am always motivated in any challenges occur. Think positively to cope these challenges.

(Participant # 7).

Humility to ask help; openness to learn; exploring the use of the computer by myself; trust in God (Participant # 8).

3.2 Technology Savvy: Being technology savvy is essentially one’s skill to be smart with technology. This skill reaches far beyond ‘understanding’ the concepts of how technology works and encompasses the ‘utilization’ of such modern technology for the purpose of enhancing productivity and efficiency. Technology savvy skills, therefore, mean utilizing one’s knowledge of the modern technology to efficiently incorporate it into personal as well as professional lives. (Cleverism, 2022). Two participants addressed their secrets to become more productive in their respective classes.

I made a recorded Video Lessons and Google Slide should be uploaded. (P3)

I demonstrated the required activity with audio video and perform it in local order. (P4)

4. Programs to assist the instructors 50s and beyond in the new normal

4.1 Seminars, Trainings and Workshops: The National Policy on Education (NPE, 2008:54) stated that “Teacher’s education shall continue to be given major emphasis in all educational planning and development”. Moreso, the policy stipulated the purpose of teacher education is to produce highly motivated, conscientious, and efficient classroom teachers for all levels of our educational system. Most of the participants suggested this program form them to enhance their technological skills.

“ A semestral training workshops on updating ICT skills, weekly physical exercise for 50s and beyond program must be provided. (P1 and P3)

“There must be more seminars and trainings in online teaching”. (P2 and P5)

“More seminars, trainings and workshops”. (P 10)

CONCLUSIONS AND RECOMMENDATIONS

The challenges faced by the participants in the new normal are eye or vision problems, poor internet connectivity and technical support, academic honesty, and inadequate laboratory. Participants too much exposure to the screen devices caused them eye strain and reddish eyes which affect their eye vision. Poor internet connectivity and technical support are one of the biggest challenges faced by the participants. Aside from the limited knowledge of the participants in using computers, poor internet connectivity had become the main problem in holding synchronous classes. Also, academic honesty became a challenge for the participants. Participants needed to exert more effort in monitoring and checking their students' outputs. Moreover, since the face-to-face class is not allowed, the problem of inadequate laboratory arises. Participants who handled laboratory subjects faced difficulty because of a scarcity of resources.

The mechanism adopted by the participants in dealing with the new normal in education is to be teachable and tech-savvy. Most of the participants adopted a docile attitude. They were humble to ask for help and show a willingness to learn the use of computers to become technology savvy. Hence, participants used their new learnings in technology as coping mechanisms and to become more productive in the class. Therefore, it is necessary to recommend constant seminars, trainings, and workshops to further enrich the faculty's knowledge on the use of technology as an effective tool in the delivery of education in this new normal. As the National Policy on Education (NPE, 2008:54) stated that "Teacher's education shall continue to be given major emphasis in all educational planning and development".

REFERENCES

- [1] Al-Fudail, M., Mellar, H. (2008). Investigating teacher stress when using technology, 2008.
- [2] Egbert, J., Paulus, T., & Nakamichi, Y. (2002). The impact of CALL instruction on language classroom technology use: A foundation for rethinking CALL teacher education? *Language Learning & Technology*, 6(3), 108-126. Retrieved from <http://ilt.msu.edu/vol6num3/egbert/default.html>.
- [3] Teo, T. (2008). Pre-service teachers' attitudes towards computer use: A Singapore survey. *Australian Journal of Educational Technology*, 24(4), 413-424.
- [4] Hubbard, P. (2008). CALL and the Future of Language Teacher Education. *CALICO Journal*, 25(2), 175-188. Retrieved from <https://calico.org/memberBrowse.php?action=article&id=683>
- [5] Mumtaz, S. (2000). Factors affecting teachers' use of information and communications technology: A review of the literature. *Journal of Information Technology for Teacher Education*, (3), 319- 342. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/14759390000200096#preview>.
- [6] Becta (British Educational Communications and Technology Agency). (2004). A Review of the Research Literature on Barriers to the uptake of ICT by teachers. Retrieved from http://dera.ioe.ac.uk/1603/1/becta_2004_barrierstouptake_litrev.pdf
- [7] Alvez, T, et al, The Experiences and Challenges Faced of the Public School Teachers Amidst the COVID-19 Pandemic: A Phenomenological Study in the Philippines, 2021.
- [8] Doolittle, P. E., & Hicks, D.. Constructivism as a theoretical foundation for the use of technology in social studies, 2003.
- [9] Dziuban, C et al. Blended learning: the new normal and emerging technologies, 2018.
- Garba, S. A., Byabazaire, Y., & Busthami, A. H. (2015). Toward the use of 21 st century teaching- learning approaches : The trend of development in Malaysian schools within the context of Asia Pacific, 2015.

- [10] Izhar, N. A., Na, Y. M. A., & Na, K. S. Teaching in the Time of Covid-19: The Challenges Faced By Teachers in Initiating Online Class Sessions. *International Journal of Academic Research in Business and Social Sciences*, 11(2), 1294-1306. 2021.
- [11] Ketchell, M., The hidden threat of teacher stress, *The conversation*, 2018.
- Kniffin et al. The Impact of the Covid-19 Pandemic on Older Workers: The Role of Self-Regulation and Organizations, 2020.
- [12] Martin, F., Budhrani, K., & Wang, C.. Examining faculty perception of their readiness to teach online, 2019
- [13] Mishra, P., & Mehta, R. . What we educators get wrong about 21st-century learning: Results of a survey. 2017.
- [14] World Health Organization (WHO). WHO Director-General's opening remarks at the media briefing on COVID-19, 2020.
- [15] Zhang, W., Wang, Y., Yang, L., & Wang, C. Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 outbreak, 2020.
- [16] Aloka, P.J.O & Bojuwoye. (2013). Gender, age and teaching experience differences in decision making behaviours of members of selected Kenyan Secondary school disciplinary panels. *Asian Social Sciences*, 9(10), doi:10.5539/ass.v9n10p43
- [17] Alufohai, P.J. & Ibhafidon, H.E. (2015). Influence of teachers' age, marital status and gender on students' academic achievement. *Asian Journal of Educational Research*, 3(4), 60-66.
- [18] Nyagah, G & Gathumbi, A. (2017). Influence of teacher characteristics on the implementation of non-formal basic education curriculum at the non-formal education centres in Nairobi, Mombasa and Kisumu Cities, Kenya. *International Journal of Education and Research*, 5(1), 207-221
- [19] Zafer Ünal & Aslihan Ünal. (2012). The impact of years of teaching experience on the classroom management approaches of elementary school teachers. *International Journal of Instruction*, 5(2), e-ISSN: 1308-1470 • www.e-iji.net p-ISSN: 1694-609X
- [20] 10(4), 72-79. Retrieved from <http://dx.doi.org/10.3991/ijet.v10i4.4717%0A>, *International Journal of Emerging Technologies in Learning*,
- [21] <https://doi.org/10.1080/00933104.2003.10473216> , *Theory and Research in Social Education*, 31(1), 72-104.
- [22] <https://doi.org/10.1080/21532974.2016.124239>, *Journal of Digital Learning in Teacher Education*, 33(1), 6-19.
- [23] <https://doi.org/10.24059/olj.v23i3.1555> *Online Learning Journal*, 23(3), 97-119.
<https://doi.org/10.3390/jrfm13030055>, *Journal of Risk and Financial Management*, 13(3), 1-6.
- [24] <https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-017-0087-5>
- [25] <https://theconversation.com/the-hidden-threat-of-teacher-stress-92676>
- [26] <https://www.aarp.org/politics-society/advocacy/info-2020/coronavirus-economic-impact-older-workers.html>
- [27] https://www.researchgate.net/publication/223806579_Investigating_teacher_stress_when_using_technology
- [28] https://www.researchgate.net/publication/349310396_The_Experiences_and_Challenges_Faced_of_the_Public_School_Teachers_Amidst_the_COVID19_Pandemic_A_Phenomenological_Study_in_the_Philippines
- [29] <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>