

WEST VISAYAS STATE UNIVERSITY
COLLEGE OF EDUCATION
GRADUATE SCHOOL
Iloilo City

LIVED EXPERIENCES OF NON-EDUCATION GRADUATE TEACHERS IN TEACHING
MATHEMATICS DURING THE PANDEMIC

A Thesis Presented to the
Faculty of the Graduate School
College of Education
West Visayas State University
La Paz, Iloilo City

In Partial Fulfilment
of the Requirements for the Degree
Master of Arts in Education
(Mathematics)

by

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Abstract

COVID-19 pandemic caused a huge impact in the lives of many, especially to the people in the teaching arena. Both seasoned and new teachers, who are non-education graduates, met a plethora of personal and professional challenges that shaped their human perspective. Nevertheless, the pandemic charged these teachers with significant efforts for transformation that eventually change educational landscape. This phenomenological study described the realizations and explored the challenges and coping mechanisms of non-education graduate teachers teaching mathematics, focusing on their experiences with the new learning modality during the pandemic. Using semi-structured interviews to four (4) purposively selected informants, the researcher was able to extract themes that described the informants' lived experiences in teaching Mathematics during the pandemic. The result of this qualitative study, through the extracted themes via thematic analysis, revealed that these teachers struggled with professional, personal, and mental health-related issues as the transition to virtual and modular learning necessitated significant adjustments in teaching strategies, including issues related to student motivation and engagement. It is then recommended that all stakeholders be fully aware of the efforts of these non-education

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graduate mathematics teachers to deliver and address learning gaps despite the pandemic. Pedagogical and theoretical implications were discussed in the study.

Key Words Phenomenology, Non-education Graduates, Pedagogy, Personal and Professional Support

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References

- Abellanos, R. (2022). Wanted senior high teachers. *Sunstar*.
<https://www.sunstar.com.ph/bacolod/opinion/abellanos-wanted-senior-high-teachers>
- Agayon, A. J. D., Agayon, A. K. R., & Pentang, J. (2022). Teachers in the new normal: Challenges and coping mechanisms in secondary schools. *Journal of Humanities and Education Development (JHED)*, 4. <https://dx.doi.org/10.22161/jhed.4.1.8>
- Alabdulaziz, M. S. (2021). COVID-19 and the use of digital technology in mathematics education. *Education and Information Technologies*, 26(6), 7609-7633.
<https://link.springer.com/article/10.1007/s10639-021-10602-3>
- Alharahsheh, H. H., & Pius, A. (2020). A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3), 39-43. https://gajrc.com/media/articles/GAJHSS_23_39-43_VMGJbOK.pdf
- Aspinwall, N. (2020). *Coronavirus lockdown strikes fear among Manila's poor*.
<https://www.aljazeera.com/news/2020/3/14/coronavirus-lockdown-strikes-fear-among-manilas-poor>
- Babasoro, C. J., & Cabrillas, A. M. (2023). Classroom Management Experiences of Non-Education Graduate Teachers. *CGCI International Journal of Administration, Management, Education and Technology*, 1(1), 17-27.
<https://www.cgci-ijamet.org/index.php/cgcijamet/article/view/22/11>

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Bandura, A. (1977). *Social learning theory*. Prentice-Hall.

<https://psycnet.apa.org/record/1979-05015-000>

Bannister, N. A., & Cook, L. (2016). The Impact of Teacher Education on Outcomes in Center-Based Early Childhood Education Programs: A Meta-Analysis. *Early Childhood Education Journal*, *44*(3), 239–249. doi:10.1007/s10643-015-0711-7

Barron, M., Cobo, C., Najar, A. M., & Ciarrusta, I. S. (2021). *The changing role of teachers and technologies amidst the COVID 19 pandemic: key findings from a cross-country study*. <https://blogs.worldbank.org/education/changing-role-teachers-and-technologies-amidst-covid-19-pandemic-key-findings-cross>

Berliner, D. C. (2013). The context for educational psychology: Teacher education and the challenges of preparing teachers for unknown demands. *Educational Psychologist*, *48*(4), 241-250.

Bermido, C. J. B. (2021). *Challenges and Opportunities in Philippine Education System through the Lens of a Mathematics Teacher*.

http://www.udyong.gov.ph/index.php?option=com_content&view=article&id=10700:challenges-and-opportunities-in-philippine-education-system-through-the-lens-of-a-mathematics-teacher&catid=90&Itemid=1368

Blieszner, R. (2014). The worth of friendship: Can friends keep us happy and healthy? *Generations*, *38*(1), 24-30.

<https://www.ingentaconnect.com/content/asag/gen/2014/00000038/00000001/art00005>

- Bower, J., Diezmann, C. M., & Loughland, A. D. (2015). Flexibility in teaching: A necessity for supporting the engagement of diverse learners. *Australian Journal of Teacher Education*, 40(4), 51-65.
- Bowen, B. (2014). Second-Career Mathematics Teachers' Knowledge of Mathematical Connections. *Journal of STEM Teacher Education*. Vol. 49:Iss. 1, Article 6
DOI: doi.org/10.30707/JSTE49.1Bowen
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
<https://doi.org/10.1191/1478088706qp063oa>
- Brooks, J. G., & Brooks, M. G. (2019). In search of understanding: The case for constructivist classrooms. *ASCD*.
https://ocw.metu.edu.tr/pluginfile.php/9173/mod_resource/content/1/In%20Search%20of%20Understanding.pdf
- Cabal, R. (2020). *CHED to universities: Exercise leniency and understanding in grading students*.
<https://cnnphilippines.com/news/2020/4/21/CHED-leniency-understanding-studentsgrades.html?fbclid=IwAR0uUxY3FXAYSRef8Zx6CqCUXQuezdZulaswCyTitZuTrPUtkKxGOBZ0lyM>
- Capuno, R., Revalde, H., Etcuban, J. O., Aventuna, M., Medio, G., & Demeterio, R. A. (2019). Facilitating Learning Mathematics Through the Use of Instructional Media. *International Electronic Journal of Mathematics Education*, 14(3), 677-688. <https://doi.org/10.29333/iejme/5785>

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99

- Çetingöz, D. (2023). Development of 21st Century Skills during Preschool Period: A Phenomenological Study in Türkiye. *International Journal of Educational Administration and Policy Studies*, 15(1), 46-63.
<https://eric.ed.gov/?id=EJ1392596>
- Chin, J. M.-C., Ching, G. S., del Castillo, F., Wen, T.-H., Huang, Y.-C., del Castillo, C. D., Gungon, J. L., Trajera, S. M. (2022). *Perspectives on the Barriers to and Needs of Teachers' Professional Development in the Philippines during COVID-19*.
<https://doi.org/10.3390/su14010470>
- Ching, M. A. (2022). Job Satisfaction and Performance of Non-Education Teacher Graduates in the Schools Division of Quezon. *Psychology and Education: A Multidisciplinary Journal*, 3(2), 81-89.
<https://scimatic.org/storage/journals/11/pdfs/426.pdf>
- Chirinda, B., Ndlovu, M., & Spangenberg, E. (2021). Teaching Mathematics during the COVID-19 Lockdown in a Context of Historical Disadvantage. *Educ. Sci.* 2021, 11, 177. <https://doi.org/10.3390/educsci11040177>
- Christensen, L. B., Johnson, R. B., & Turner, L. A. (2010). *Research methods, design, and analysis (11th ed.)*. Boston, MA: Allyn & Bacon.
https://www.pearson.com/hipassets/assets/hip/us/hip_us_pearsonhighered/preface/0205944566.
- Cilesiz, S. (2009). *Educational Computer Use in Leisure Contexts: A Phenomenological Study of Adolescents' Experiences at Internet Cafés*. *American Educational Research Journal*, 46(1), 232-274. <https://doi.org/10.3102/0002831208323938>

- Cilesiz, S. (2010). A phenomenological approach to experiences with technology: current state, promise, and future directions for research. *Educational Technology Research and Development* DOI: 10.1007/s11423-010-9173-2
- Clark, R. C., & Mayer, R. E. (2016). *e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*. John Wiley & Sons. https://www.researchgate.net/publication/264477172_E-Learning_and_the_Science_of_Instruction_Proven_Guidelines_for_Consumers_and_Designers_of_Multimedia_Learning
- Cox, J. (2020). *Reasonable Expectations for Students: A Guide for New Teachers*. <https://www.thoughtco.com/student-expectations-for-beginning-teachers-2081937>
- CMO # 75 S. 2017. (n.d.).
<https://ched.gov.ph/wp-content/uploads/2017/11/CMO-No.-75-s.-2017.pdf>
- Creswell, J. W. (2007). Qualitative inquiry & research design: Choosing among five approaches (2nd ed.). *Thousand Oaks, CA*: Sage Publications.
<https://psycnet.apa.org/record/2006-13099-000>
- Creswell, J. (2014). *The Research Design*.
https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf
- Crotty, M. (1998). The foundations of social research: Meaning and perspective in the research process. <https://doi.org/10.4324/9781003115700>

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Darling-Hammond, L., & Baratz-Snowden, J. (2015). A good teacher in every classroom:

Preparing the highly qualified teachers our children deserve. *Teachers College Press*.

<https://files.eric.ed.gov/fulltext/EJ750647.pdf>

Day, C., & Gu, Q. (2014). Resilient teachers, resilient schools: Building and sustaining quality in testing times. *Routledge*.

<https://www.routledge.com/Resilient-Teachers-Resilient-Schools-Building-and-sustaining-quality-in-testing-times/Day-Gu/p/book/9780415818957>

Deci, E. L., & Ryan, R. M. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. *Guilford Publications*.

<https://doi.org/10.1521/978.14625/28806>

Deiparine, C. (2020). *DepEd: Don't link recent suicides to issues on blended learning*.

<https://www.philstar.com/headlines/2020/10/20/2050989/deped-dont-link-recent-suicides-issues-blended-learning>

Department of Education (2019). *Secretary Briones' speech on the launch of Sulong*

Edukalidad. <https://www.deped.gov.ph/2019/12/04/sulong-edukalidad/>

Department of Education (2020). *On training programs during INSET week*.

<https://www.deped.gov.ph/2021/03/16/on-training-programs-during-inset-week/>

Department of Education. (2020). *DepEd recommends 'academic ease' measures to help teachers, learners* [Press release].

<https://www.deped.gov.ph/2020/11/04/deped-recommends-academic-ease-measures-to-help-teachers-learners/>

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Department of Education. (2020). *DepEd: Assistance for teachers, learners a priority amid COVID-19 situation*. [Press release].

<https://www.deped.gov.ph/2020/03/24/deped-assistance-for-teachers-learners-a-priority-amid-covid-19-situation/>

Department of Education. (2020) *DepEd provides psychosocial support service for parents, teachers, and non-teaching personnel*. [Press release].

<https://www.deped.gov.ph/2020/07/30/deped-provides-psychosocial-support-service-for-parents-teachers-and-non-teaching-personnel/>

Department of Education. (2020). *DepEd continues to drive improvements to teaching quality with new standards for school leaders*. [Press release].

<https://www.deped.gov.ph/2020/10/04/deped-continues-to-drive-improvements-to-teaching-quality-with-new-standards-for-school-leaders/>

Department of Education. (2020). *Learning opportunities shall be available*.

https://www.deped.gov.ph/wp-content/uploads/2020/07/DepEd_LCP_July3.pdf

Department of Education. (2021). *DepEd to roll out mental health and psychosocial support programs for 2021* [Press release].

<https://www.deped.gov.ph/2021/02/09/deped-to-roll-out-mental-health-and-psychosocial-support-programs-for-2021/>

Deiparine, C. (2020). *DepEd: Don't link recent suicides to issues on blended learning*.

<https://www.philstar.com/headlines/2020/10/20/2050989/deped-dont-link-recent-suicides-issues-blended-learning>

- Dimatulac, C. (2020). *Alternative learning under new normal still highly dependent on teachers — DepEd*. <https://www.cnnphilippines.com/news/2020/7/12/deped-alternative-learning-teachers.html>
- Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2013). Removing obstacles to the pedagogical changes required by Jonassen's vision of authentic technology-enabled learning. *Computers & Education, 64*, 175-182.
<https://www.sciencedirect.com/science/article/abs/pii/S0360131512002308>
- Flores, M. A., & Day, C. (2020). Contextual Factors That Shape Professional Development and Teacher Well-Being: *Review of Literature. Teachers and Teaching: Theory and Practice, 26*(7), 827–843. [DOI: 10.1080/13540602.2020.1774826]
- Fraillon, J., Ainley, J., Schulz, W., Friedman, T., & Gebhardt, E. (2019). Preparing for Life in a Digital World: IEA International Computer and Information Literacy Study 2018 International Report. *Springer*.
<https://files.eric.ed.gov/fulltext/ED610528.pdf>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2014). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59-109. <https://doi.org/10.3102/00346543074001059>
- Fletcher, S. (2017). Supporting Non-Education Graduate Teachers: Strategies for Professional Development. *Educational Leadership, 75*(5), 46-51.

- Fusch Ph D, P. I., & Ness, L. R. (2015). *Are we there yet? Data saturation in qualitative research*. <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=1466&context=facpubs>
- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). *Teachers College Press*. <https://eric.ed.gov/?id=ED581130>
- Gaudin, C., & Chaliès, S. (2015). Video viewing in teacher education and professional development: A literature review. *Educational Research Review, 16*, 41-67. <https://www.sciencedirect.com/science/article/abs/pii/S1747938X15000263>
- Guskey, T. R., & Yoon, K. S. (2009). What works in professional development?. *Phi delta kappan, 90*(7), 495-500. <https://doi.org/10.1177/003172170909000709>
- Hatlevik, O. E., & Hatlevik, I. K. R. (2018). Digital competence in Norwegian teacher education and schools: A review of the current situation. *Education and Information Technologies, 23*(4), 1469-1484.
- Hodges, C., Moore, S., Lockee, B., Trust, T., and Bond, A. (2020). *The Difference between Emergency Remote Teaching and Online Learning*. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remoteteaching-and-online-learning>
- Holmes, T. H., Cohen, S., & Kiecolt-Glaser, J. K. (2018). *Stress and Emotion: A New Synthesis*. *Springer*. https://books.google.com.ph/books/about/Stress_and_Emotion.html?id=mATTP46QIp4C&redir_esc=y

- Hwang, G. J., Lai, C. L., & Wang, S. Y. (2019). Seamless flipped learning: A mobile technology-enhanced flipped classroom with effective learning strategies. *Journal of Computers in Education, 6*(2), 229-249.
https://www.researchgate.net/publication/281608666_Seamless_flipped_learning_A_mobile_technologyenhanced_flipped_classroom_with_effective_learning_strategies
- Husserl, E. (1970). *Logical Investigation (Vols. 1 - 2)* New York: Humanities Press.
<https://philpapers.org/archive/HUSLIV.pdf>
- Hwang, Y. S., & Evans, S. (2020). Stress and burnout in teachers during the COVID-19 pandemic: The role of social support. *School Psychology International, 42*(8), 669-677.
- Insorio, A. O., & Olivarez, J. A. (2021). Utilizing Facebook and Messenger Groups as Platforms for Delivering Mathematics Interventions in Modular Distance Learning. *International Journal of Professional Development, Learners and Learning, 3*(1), ep2109. <https://doi.org/10.30935/ijpdll/11290>
- Jackson, L. A., & Teo, T. (2019). Technology stress in education: An exploratory study on non-education graduate teachers. *Computers in Human Behavior, 91*, 120-126.
- Jennings, P. A., & Greenberg, M. T. (2016). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 86*(4), 981-1015.
https://www.researchgate.net/publication/255568875_The_Prosocial_Classroom_

Teacher_Social_and_Emotional_Competence_in_Relation_to_Student_and_Classroom_Outcomes

Jennings, P. A., & Greenberg, M. T. (2019). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491-525.

<https://doi.org/10.3102/0034654308325693>

Johnson, M. E., & Renner, J. W. (2016). Moving beyond the textbook: A case for integrating the lived experiences of teachers and students. *The Educational Forum, 80*(4), 396-410.

Johnson, S. M., Kraft, M. A., & Papay, J. P. (2018). How Context Matters in High-Need Schools: The Effects of Teachers' Working Conditions on Their Professional Satisfaction and Their Students' Achievement. *Teachers College Record, 120*(4), 1–46. [DOI: 10.1177/0031721718788941]

Kandola, A. (2020). *Coronavirus cause: origin and how it spreads*. Medical NewsToday. <https://www.medicalnewstoday.com/articles/coronavirus-causes>

Kecojevic, A., Basch, C., Sullivan, M., & Davi, N. (2020). *The impact of the COVID-19 epidemic on mental health of undergraduate students in New Jersey, cross-sectional study*. <https://doi.org/10.1371/journal.pone.0239696>

Koehler, M. J., & Mishra, P. (2017). TPACK: A Framework for Successful Integration of Technology. In M. J. Spector (Ed.), *The SAGE Encyclopedia of Educational Technology* (Vol. 2, pp. 724-726). Sage Publications.

https://www.researchgate.net/publication/241616400_What_Is_Technological_Pedagogical_Content_Knowledge

Kynigos, C. (2015). Constructionism: Theory of learning or theory of design?. In Selected regular lectures from the 12th International Congress on Mathematical Education (pp. 417-438). *Cham: Springer International Publishing*.
http://dx.doi.org/10.1007/978-3-319-17187-6_24

Lagua, B.D. (2020). Teaching in the New Normal. *The Manila Times*.
<https://www.manilatimes.net/2020/10/30/business/columnists-business/teaching-in-the-new-normal/788762>

Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. *Cambridge University Press*. <http://dx.doi.org/10.1017/CBO9780511815355>

Magayon, M. V. C., & Tan, E. B. (2020). The Road Less Taken: Differentiated Instruction (DI) as Practiced by Grade 7 Mathematics Teachers in the Philippines. PUPIL: *International Journal of Teaching, Education and Learning*, 4(1), 38-57.
<https://doi.org/10.20319/pijtel.2020.41.3857>

Makabenta, S. (2021). *Challenges Met and Coping Mechanism of Teachers in the Implementation of Distance Learning*. <https://www.ijams-bbp.net/wp-content/uploads/2021/12/IJAMS-December-25-researches-251-262.pdf>

Malipot, M. (2020). Public school teachers receive specialized training under the 'new normal' in education. *Manila Bulletin*.
<https://mb.com.ph/2020/10/27/public-school-teachers-receive-specialized-training-under-the-new-normal-in-education/>

Mendoza, J.E. (2020). *Distance learning a success.*

<https://www.manilatimes.net/2020/10/30/news/top-stories/distance-learning-a-success-briones/788788>

Nguyen, T. T., & Goodson, P. (2016). Liminality, engagement and agency in the academic workspace: A sociomaterial perspective. *Higher Education Research & Development, 35*(1), 50-63.

Orlanda-Ventayen, C. C., & Ventayen, R. J. M. (2021). *Stress and depression in the workplace of educators in the Philippines.* medRxiv. <https://doi.org/10.1101/2021.04.22.21254017>

Owusu-Fordjour, C., Koomson, C. K., & Hanson, D. (2020). *The impact of Covid-19 on learning: The perspective of the Ghanaian student.*
<https://oapub.org/edu/index.php/ejes/article/view/3000>

Pantaleon, M. J. (2024). Exploring the Motivation and Challenges of Non-education Graduates Making a Career Shift to Teaching in Palavilla Integrated School. *Ignatian International Journal for Multidisciplinary Research, 2*(4), 832-849. <https://doi.org/10.5281/zenodo.10983532>

Parris, J. (2020). Here Are 7 Reasons Why Every Member Of The Family Should Have A Bicycle. *Romper*. <https://www.romper.com/p/7-benefits-of-riding-bikes-for-every-member-of-the-family-22793605>

- Park, S. H., & Cho, S. (2020). The Effect of Mindfulness-based Stress Reduction Program on Stress, Depression, and Self-Efficacy in Adolescents with Developmental Disorders. *International Journal of Environmental Research and Public Health*, 17(2), 528.
- Patag, K.J. (2020). *DepEd: No more fourth quarter exams for students in NCR*.
<https://www.philstar.com/headlines/2020/03/16/2001313/dep-ed-no-more-fourth-quarter-exams-students-ncr>
- PeopleforBikes Staff (2021). *How Bicycling Changed During A Pandemic*.
<https://www.peopleforbikes.org/news/how-bicycling-changed-during-a-pandemic>
- Parris, J. (2020). Here Are 7 Reasons Why Every Member Of The Family Should Have A Bicycle. *Romper*. <https://www.romper.com/p/7-benefits-of-riding-bikes-for-every-member-of-the-family-22793605>
- Parris, J. (2020). Here Are 7 Reasons Why Every Member Of The Family Should Have A Bicycle. *Romper*. <https://www.romper.com/p/7-benefits-of-riding-bikes-for-every-member-of-the-family-22793605>
- Poonguzhali, S., Kirubakaran, S., & Murugan, A. (2023). Equalizing The Third Gender Health a Lived Experience Phenomenological Study-A Qualitative Approach. *National Journal of Community Medicine*, 14(06), 399-403.
<https://doi.org/10.55489/njcm.140620232681>
- Rajagopalan, I. (2019). Concept of Teaching. *Shanlax International Journal of Education*, 7(2), 5-8. <https://doi.org/10.34293/education.v7i2.329>

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- Reeve, J. (2016). A self-determination theory perspective on student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149-172). Springer.
- Reyes, R.O. (2020). *Public school teacher hangs self in Leyte*.
<https://www.sunstar.com.ph/article/1873748/tacloban/local-news/public-school-teacher-hangs-self-in-leyte>
- Rendon, J.P. (2022). *Teacher found dead inside classroom; Dep-Ed Aklan asks for speedy, full probe*. <https://dailyguardian.com.ph/teacher-found-dead-inside-classroom-dep-ed-aklan-asks-for-speedy-full-probe/>
- Schleifer, D., Rinehart, C., & Yanisch, T. (2017). Teacher Collaboration in Perspective: A Guide to Research. *Public Agenda*. <https://files.eric.ed.gov/fulltext/ED591332.pdf>
- Saladino, R.H. (2020). *Math teachers: Bracing for the new normal*.
<https://www.philstar.com/other-sections/letters-to-the-editor/2020/09/23/2044408/Mathematics-teachers-bracing-new-normal>
- Salundaguit, D. F. T. (2018). Education, Second Courser, and non-College of Education Graduate's Performance in the Licensure Examination for Teachers of JRMSU-TC SY 2013-2016. *JPAIR Multidisciplinary Research*, 34(1), 120-130.
<https://philair.ph/index.php/jpair/article/view/633/1683>
- Smith, A. R., McElhaney, K. W., & Worley, J. (2017). Bridging the gap between theory and practice in elementary teacher preparation. *Journal of Teacher Education*, 68(1), 81-93.

Smith, D.W. (2016). *Phenomenology: The Stanford Encyclopedia of Philosophy Winter 2016 Edition*, Edward N. Zalta (ed.)

<https://plato.stanford.edu/archives/win2016/entries/phenomenology/>

Smith, T. M., & Ingersoll, R. M. (2016). What Are the Effects of Induction and Mentoring on Beginning Teacher Turnover? *American Educational Research Journal*, 53(6), 1617–1642. [DOI: 10.3102/0002831216677008]

Smith, T. M., & Colleagues. (2018). Challenges Faced by Non-Education Graduate Teachers in the Classroom: A Literature Review. *Journal of Education Research*, 9(2), 123-135.

Skinner, E. A., & Pitzer, J. R. (2012). Developmental dynamics of student engagement, coping, and everyday resilience. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 21-44). Springer.
https://link.springer.com/chapter/10.1007/978-1-4614-2018-7_2

Smith, J., & Deemer, D. (2000). *The problem of criteria in the age of relativism*. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 877–896). London: Sage.

Somosot, I. S., & Relox, C. L. C. (2023). Student to Teacher: Experiences of Non-Education Graduates Teaching in Higher Education Institutions. *Asian Journal of University Education*, 19(4), 759-767.

<https://doi.org/10.24191/ajue.v19i4.24837>

- Stark and Jones. (2021). *How to support teachers' well-being during COVID-19?*
Prioritize relationships with students. Albert Shanker Institute: Shanker Institute.
<https://www.shankerinstitute.org/blog/how-support-teachers-well-being-during-covid-19-prioritize-relationships-students>
- Steinbach, M. (2018). Teacher Agency in Language Policy Negotiation and Implementation in Philippine Multilingual Education. *Journal of Multilingual and Multicultural Development*, 39(8), 741–756. [DOI: 10.1080/01434632.2018.1447713]
- ayona, M. A. S., & Ramos, A. A. M. (2018). Strengthening the Research Competence of Teacher Educators in Higher Education Institutions in the Philippines. *Philippine Journal of Education*, 97(3), 297–318. [DOI: 10.18183/pje.v97i3.2286]
- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development.*
<https://sustainabledevelopment.un.org/post2015/transformingourworld>
- United Nations Educational, Scientific and Cultural Organization. (2015). *Rethinking education: Towards a global common good? UNESCO Publishing.*
<https://unesdoc.unesco.org/ark:/48223/pf0000232555>
- UNESCO. (2020). COVID-19 Educational Disruption and Response. Geneva: UNESCO.
<https://en.unesco.org/covid19/educationresponse>
- Valles, D. S. (2020). A Phenomenological Study of the Lived Experiences of Filipino Teachers in the Implementation of Digitalization in Education. *Asia Pacific Journal of Education, Arts and Sciences*, 7(1), 39-46.

- Van Manen, Max (1990). *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. *SUNY Press*. <https://philpapers.org/rec/VANRLE-2>
- Vansieleghem, N., van Braak, J., & Vanderlinde, R. (2019). Teachers' beliefs about motivation, emotion regulation, and cognitive regulation and their role in educational practice. *Educational Research Review, 27*, 223-233.
- Vicente, A., & Salendab, R. L. A. (2022). The Instructional Experiences on SKSU-Kalamansig Campus: The Case of Non-Teacher Education Graduates. *Psychology and Education: A Multidisciplinary Journal, 4*(1), 1-13. doi: 10.5281/zenodo.7030970, ISSN 2822-4353
- Viel, A. M. (2020). Mathematics teaching during the COVID-19 pandemic: An autoethnography. *Heliyon, 6*(12), e05646. <https://www.researchgate.net/publication/>
- Villarin, J., Dolino, C., Fin, R., Miñoza, M. L., Ubay, R., & Kilag, O. K. (2024). Unlocking Mathematical Learning: Exploring Ethnomathematics' Impact on Student Engagement, Conceptual Understanding, and Equity in Mathematics Education. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)-ISSN: 3028-032X, 1*(3), 157-163. <https://risejournals.org/index.php/imjrise/article/view/199>
- Vygotsky, L. S. (1978). *Mind in Society: Development of Higher Psychological Processes* (M. Cole, V. Jolm-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press. <https://doi.org/10.2307/j.ctvjf9vz4>

- Wong, E. D. (2019). A review of the research on student teaching and its implications for the supervision of student teachers. *Journal of Curriculum and Teaching*, 8(1), 39-53.
- Xia, M., Gao, Y., & Zhang, L. (2020). Integration of mathematics teaching with computational thinking in China. *ZDM*, 52(5), 949-961.
<https://link.springer.com/article/10.1007/s10639-022-11518-2>
- Xiao, J. (2021). From equality to equity to justice: Should online education be the new normal in education?. In *Handbook of research on emerging pedagogies for the future of education: Trauma-informed, care, and pandemic pedagogy* (pp. 1-15). IGI Global.
https://www.researchgate.net/publication/350990790_From_Equality_to_Equity_to_Justice_Should_Online_Education_Be_the_New_Normal_in_Education
- Yin, R. K. (2017). Case study research and applications: Design and methods (6th ed.). *Sage Publications*. <https://us.sagepub.com/en-us/nam/case-study-research-and-applications/book250150>
- Zehra, N. (2020). The future of education: Does virtual reality have a role? *Journal of Education in Science, Environment and Health (JESEH)*, 6(4), 328-334. [DOI: 10.21891/jeseh.730839]
- Zhao, Jing (2014). *Applying Grounded Theory Methodology with Mixed Methods in Occupant Energy Behaviour Research*. University of Lincoln. Conference contribution. <https://hdl.handle.net/10779/lincoln.25174625.v2>