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THE ROLE OF TECHNOLOGY INTEGRATION IN THE ADVANCEMENT OF ALTERNATIVE LEARNING SYSTEM IN DAVAO DE ORO DIVISION

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ABSTRACT

This study examined the influence of technology integration on the implementation of the Alternative Learning System (ALS) in the Division of Davao de Oro. Utilizing a descriptive-correlational research design, the study involved 50 ALS teachers selected through purposive sampling. Validated and pilot-tested survey instruments were used to gather data on the extent of technology integration and ALS implementation. Statistical tools such as weighted mean, Pearson product-moment correlation, and multiple regression analysis were employed in data analysis. Findings revealed that both technology integration and ALS implementation were at an extensive level. A significant positive correlation between the two variables was established, indicating that higher levels of technology integration are associated with improved ALS implementation. Furthermore, all five domains of technology integration, teaching strategies, experience with computer technologies, confidence level in integrating technology, perceived contribution of technology to student learning, and value of technology integration, significantly influenced ALS implementation, with confidence level in integrating technology having the strongest impact. The study affirms the relevance of the technological pedagogical content knowledge framework, constructivist learning theory, self-determination theory, and social learning theory in guiding effective technology use in ALS. Recommendations were offered to DepEd officials, school leaders, ALS teachers, and future researchers to support digital transformation in alternative education.

KEYWORDS: *Technology Integration; Alternative Learning System; TPACK; ALS Implementation; Educational Technology; DepEd; Teacher Confidence; Constructivism; Digital Learning*

INTRODUCTION

The rapid advancement of technology has significantly reshaped education, offering dynamic and interactive learning experiences that develop essential 21st-century skills (U.S. Department of Education, 2021). Globally, there is increasing pressure to integrate digital tools into curricula to bridge learning gaps and improve accessibility, particularly for marginalized and non-traditional learners. Alternative Learning Systems (ALS), designed for out-of-school youth and adults, stand to benefit greatly from this shift, as technology offers flexible, inclusive, and learner-centered opportunities (UNESCO, 2021).

The COVID-19 pandemic further underscored the importance of digital integration in education, exposing deep inequities in access and connectivity. Countries with robust digital infrastructure were better equipped to maintain educational continuity, while many low- and middle-income nations struggled (World Bank, 2022). In the Philippines, the Department of Education (DepEd) has acknowledged these challenges and emphasized the integration of technology in ALS. However, implementation remains limited due to barriers such as poor internet access, lack of devices, and limited digital training for educators (Bagarinao & Ocampo, 2022).

To address these gaps, DepEd introduced the MATATAG Curriculum (DepEd Order No. 013, s. 2023), which promotes foundational skills, competency-based learning, and digital integration. Yet, in rural areas like Davao de Oro, these efforts face heightened challenges due to inadequate infrastructure and limited local support (Municipality of Davao de Oro, 2023).

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Given ALS's role in promoting inclusive education and workforce readiness, understanding how technology affects its implementation is critical. This study investigates the extent of technology integration in ALS in Davao de Oro and its impact on program delivery and learner outcomes. Findings aim to inform policies and practices that enhance the effectiveness and inclusivity of ALS through digital innovation.

REVIEW OF SIGNIFICANT LITERATURE

This study examines the relationship between **technology integration** and **Alternative Learning System (ALS) implementation**. The independent variable, technology integration, includes five indicators: teaching strategies, experience with computer technologies, confidence in integrating technology, contribution to student learning, and perceived value of integration (Cagang, 2024). The dependent variable, ALS implementation, comprises learning materials, environment, flexible programs, stakeholder partnerships, and facilities (Obispo, 2023).

Technology Integration in Education

Technology integration has become vital in enhancing instructional practices and fostering 21st-century skills such as critical thinking, collaboration, and creativity (Torrato et al., 2020; Liu et al., 2022). Effective integration depends on teachers' readiness, professional development, and school support (Rao & Jalajakshi, 2021; Spiteri & Rundgren, 2020; Chandra & Llord, 2020). Despite its benefits, barriers such as lack of training, limited confidence, and inconsistent use persist (Mercader & Gairin, 2020; Sofia, 2019). Targeted PD programs and access to reliable digital tools are essential for successful implementation (Demir & Akpinar, 2018; Ricardo-Barreto, 2020).

Studies highlight that interactive and student-centered digital strategies—such as educational games, multimedia-enhanced presentations, and online resources—boost learner engagement and performance (Keane & Keane, 2021; Hughes & Read, 2019; Cheung et al., 2021). The school culture also influences teachers' technology use, with administrative support playing a significant role in increasing confidence and usage frequency (Watson & Rockinson-Szapkiw, 2021; Moluayonge & Lyonga, 2021).

Teaching Strategies and Digital Competence

Modern teaching strategies involve using technology to promote active learning through interactive content and multimedia tools (Ismail & Ahmed, 2021; Bala & Tao, 2019). Efficient use of presentations, online content, and resource management enhances instruction and student participation (Obispo, 2023; Hamilton et al., 2020).

Experience with Computer Technologies

Teachers' familiarity with digital tools like MS Office, communication apps, and data management software improves teaching efficiency and communication with stakeholders (Garcia & Asiri, 2021; Chatterjee & Correia, 2020). Online platforms such as Zoom and Google Meet have transformed learning environments, enabling flexible and accessible instruction (Kim, 2020; Cavanaugh et al., 2021). Proficiency in organizing and retrieving digital files supports adaptive, responsive teaching practices (Jones & Dexter, 2021; Karaca et al., 2021).

STATEMENT OF THE PROBLEM

This study determined the relationship between the technology integration and alternative learning system implementation. More specifically, it sought to answer the following questions:

1. What is the extent of technology integration in the classroom in terms of:
   1.1. Teaching Strategies;
   1.2. Experience with Computer Technologies;
   1.3. Confidence Level in Integrating Technology;
   1.4. How Technology Contributed to Student Learning; and
   1.5. Value of Technology Integration?
2. What is the extent of alternative learning system implementation in terms of:
   2.1. Learning Resources Materials;
   2.2. Learning Environment;
   2.3 Flexible Learning Program;
   2.4. Partnership with Stakeholders;
   2.5. Learning Facilities.

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3. Is there a significant relationship between the technology integration and alternative learning system implementation?
4. Which of the domains of the technology integration significantly influence alternative learning system implementation?

METHODOLOGY

This chapter introduces the methodological aspect of the study. This covers the research design, research respondents, research instruments, data gathering procedure, and data analysis employed in this investigation.

Research Design

This study adopted a quantitative research design, specifically a descriptive correlational approach, to investigate the relationship between technology integration and the implementation of the Alternative Learning System (ALS). Quantitative research, as defined by Apuke (2017), involves systematically gathering numerical data and analyzing it statistically to explain or clarify specific research questions or problems. This methodology is suitable for studies aiming to objectively measure and assess relationships between variables, allowing for accurate quantification of the associations present (Creswell & Creswell, 2017). By using this approach, the study seeks to provide empirical insights into the role of technology in advancing ALS practices and outcomes.

Descriptive correlational research is particularly useful for this study as it enables the observation and analysis of naturally occurring relationships among variables without researcher intervention. This non-experimental design is effective in identifying patterns or associations between technology integration and ALS implementation, as noted by Davis (2021), allowing the study to capture

realistic data reflective of current educational practices. As Korrapati (2016) discusses, descriptive research focuses on the inherent characteristics of variables, while correlational research evaluates the potential associations between them, without manipulating or altering the study environment.

Employing a descriptive correlational approach is appropriate for examining whether and how levels of technology integration are associated with the effectiveness and reach of ALS programs. This design permits a comprehensive analysis of variables such as teaching strategies, available learning materials, and infrastructure within ALS, providing a clear view of their interplay (Kabir, 2016). The approach helps identify significant patterns between the two variables, potentially guiding institutions in optimizing their technology investments and support systems to strengthen ALS implementations (Creswell & Creswell, 2017).

Research Respondents

In this study, the research respondents consist of 50 Alternative Learning System (ALS) teacher-participants within the Division of Davao de Oro. Based on Slovin's formula with a 5% margin of error, the total population of ALS teachers in the division was determined to be 57. These educators were selected as respondents due to their direct involvement in ALS program implementation, particularly in delivering flexible learning opportunities to out-of-school youth and adult learners. As key facilitators of ALS instruction, their insights are crucial in assessing the extent and impact of technology integration on ALS effectiveness. Their role in adapting teaching strategies, utilizing digital resources, and addressing learning barriers makes them ideal participants for this study (Cohen et al., 2018).

The ALS teachers were chosen using purposive sampling, a method that ensures the selection of participants with specific expertise and experience relevant to the research objectives. The inclusion criteria for this study were as follows: (1) active ALS teachers within the Division of Davao de Oro, (2) at least one year of teaching experience in the ALS program, and (3) engagement in technology-supported instruction within ALS. These criteria ensured that the respondents had sufficient exposure to both traditional and digital teaching methods, providing valuable perspectives on the challenges and benefits of technology integration. The chosen sample size of 50 respondents balances statistical rigor with feasibility, allowing for meaningful analysis of the relationship between technology integration (independent variable) and ALS implementation (dependent variable). This methodological approach aligns with quantitative research standards, ensuring the reliability and applicability of findings in shaping future ALS policies and practices (Creswell & Creswell, 2017; Marshall & Rossman, 2014).

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Research Instruments

The primary instrument for data collection was a structured questionnaire designed to measure both, technology integration and alternative learning system implementation. The questionnaire consisted of closed-ended questions with Likert-scale items to quantify perceptions and experiences.

For data collection, this study utilized an adapted survey questionnaire. The questionnaire that was employed in this undertaking was divided into two sets. The first set focused on the extent of technology integration. The second set focused on the extent of alternative learning system implementation.

Technology Integration. The technology integration questionnaire was adapted from Obispo, R. D. (2023). The instrument consisted of 25 items. It had five indicators namely; teaching strategies (1-5), experience with computer technologies (1-5), confidence level in integrating technology (1-5), how technology contributed to student learning (1-5), and value of technology integration (1-5).

The technology integration questionnaire, adapted from Obispo (2023) and containing 25 items, was subjected to pilot testing to assess its reliability. This testing resulted in a Cronbach's alpha of 0.89, suggesting a high level of internal consistency among the items. A high internal consistency indicates that the items within each indicator, such as teaching strategies, experience with computer technologies, confidence level in integrating technology, contributions to student learning, and the value of technology integration, effectively measure the construct of technology integration cohesively. This strong reliability supports the suitability of the questionnaire for assessing teachers' perceptions and practices regarding technology integration, making it a reliable tool for data collection in this study. Below was the grading scale of the extent of teacher reflective practices.

Mean Interval	Descriptive Level	Descriptive Interpretation
4.20 - 5.00	Very Extensive	The technology integration in the classroom is always evident.
3.40 - 4.19	Extensive	The technology integration in the classroom is oftentimes evident.
2.60 - 3.39	Moderately Extensive	The technology integration in the classroom is occasionally evident.
1.80 - 2.59	Less Extensive	The technology integration in the classroom is seldom evident.
1.00 – 1.79	Not Extensive	The technology integration in the classroom is never evident.

Alternative Learning System Implementation. alternative learning system implementation questionnaire was adapted from Cagang, A. (2024). The instrument consisted of 32 items. It had three indicators namely; learning resources materials (1-7), learning environment (1-6), flexible learning program (1- 8), partnership with stakeholders (1-4), and learning facilities (1-7).

The alternative learning system implementation questionnaire, adapted from Cagang (2024) with 32 items, was also pilot tested and yielded a Cronbach's alpha of 0.91, indicating very high internal consistency. This result implies that the items are consistently aligned in measuring ALS implementation through its various indicators, including learning resources materials, learning environment, flexible learning programs, partnerships with stakeholders, and learning facilities. High internal consistency here suggests that this questionnaire is appropriate for capturing nuanced insights into ALS practices, as it effectively reflects the multiple aspects of ALS implementation that impact learning outcomes. Thus, the reliability of this instrument reinforces its appropriateness for gathering valid data on ALS implementation in this study. Below was the grading scale of the extent of teacher professional development.

Mean Interval	Descriptive Level	Descriptive Interpretation
4.20 - 5.00	Very Extensive	Alternative Learning System implementation is always evident.
3.40 - 4.19	Extensive	Alternative Learning System implementation is oftentimes evident.
2.60 - 3.39	Moderately Extensive	Alternative Learning System implementation is occasionally evident.
1.80 - 2.59	Less Extensive	Alternative Learning System implementation is seldom evident.
1.00 – 1.79	Not Extensive	Alternative Learning System implementation is never evident.

The instruments in this study were contextualized to achieve the purpose of this study. The researcher integrated all the comments and suggestions of the adviser, panel members and expert validators for the refinement of the tools and to achieve construct validity.

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RESULTS AND DISCUSSIONS

The study highlights the positive impact of technology integration in the Alternative Learning System (ALS), where teachers employ digital tools not only for presentation but also to enhance student engagement, higher-order thinking, and active learning. This aligns with research emphasizing the role of technology in fostering analysis, synthesis, and evaluation skills.

ALS teachers frequently use interactive games, multimedia presentations, and educational websites to make lessons more engaging and accessible. These strategies support diverse learning styles, improve comprehension, and deepen understanding, as emphasized by various researchers (e.g., Keane & Keane, Mercader & Gairin, Hamilton et al.).
The study also underscores teachers' proficiency in digital tools (e.g., Microsoft Office, Google Meet, Zoom), which supports lesson planning, assessments, and communication. These tools enhance efficiency, collaboration, and data management, especially in non-traditional and remote learning contexts.

Moreover, teachers' confidence in using technology promotes creativity, critical thinking, and fosters adaptive, student-centered learning environments. Their use of dashboards, digital file sharing, and multimedia resources empowers learners to become more independent and self-regulated.

The findings affirm that technology enhances instructional delivery, supports inclusive practices, facilitates real-time feedback, and aligns with constructivist and learner-centered approaches. Overall, the effective use of technology in ALS leads to more engaging, responsive, and innovative learning experiences, addressing the varied needs of learners and improving educational outcomes.

CONCLUSION AND RECOMMENDATIONS

Presented in this chapter are the findings based on the results of the data, the conclusions drawn from the findings, and the recommendations for consideration.

The main focus of the study was to determine the significance of the relationship between technology integration and alternative learning system implementation. The study was conducted with the selected teachers from the Division of Davao de Oro. There were fifty (50) alternative learning system teachers who participated in this study. A descriptive correlational method of research was used in utilizing adopted research instruments. The said instruments were validated by the panel of experts and subjected to pilot testing before it was made ready for administration. Weighted mean, Pearson product moment correlation, and regression analysis were statistical tools used in analyzing the data. The hypotheses in this study were tested at a 0.05 level of significance.

The major findings of the study were the following: the extent of the technology integration of the teachers is extensive. Meanwhile, the extent of the alternative learning system implementation of the teachers is also extensive. It was found that there is a significant relationship between technology integration and the alternative learning system implementation. The hypotheses of no significant relationship between technology integration and alternative learning system implementation and none of the domains of technology integration significantly influence the alternative learning system implementation were rejected.

Conclusions

Based on the findings of this study, the following conclusions were offered: The extent of technology integration is extensive, which implies that it is oftentimes evident. All dimensions of technology integration which include teaching strategies, experience with computer technologies, confidence level in integrating technology, how technology contributed to student learning, and value of technology integration, are at an extensive level, which means it is oftentimes evident. Meanwhile, the extent of alternative learning system implementation is also extensive, which means that it is oftentimes evident. All dimensions of alternative learning system implementation are oftentimes evident. Both variables call for all school members to work hand in hand to strengthen the existing status of the technology integration and alternative learning system implementation.

Based on the findings, technology integration, and alternative learning system implementation are correlated. Also, technology integration significantly influences alternative learning system implementation. All domains of technology integration, namely, teaching strategies, experience with computer technologies, confidence level in integrating technology, how technology contributed to student learning, and value of technology integration significantly

influence alternative learning system implementation by registering a p-value of .001 which is less than .05 in the level of significance. This leads to the rejection of the null hypotheses. Further, the result indicates that for every unit increase in the five domains of technology integration, alternative learning system implementation also increases.

Recommendations

The following suggestions were offered based on the conclusions of the study: For higher officials in the Department of Education, it is recommended that sustained support be given to technology-driven initiatives in ALS. Given the strong predictive relationship between technology integration and successful ALS implementation, the Department should prioritize investment in technological infrastructure, especially in underserved and remote areas. This includes provisioning of digital tools, stable internet connectivity, and access to learning management systems tailored for alternative learning system learners. Moreover, the Department should institutionalize continuous professional development programs that are focused on building alternative learning system teachers' competencies in technological pedagogical content knowledge, ensuring that facilitators are not only technically capable but also pedagogically sound in applying technology to diverse learning contexts. Policy support and funding must be directed toward creating inclusive digital education frameworks that address the unique needs of alternative learning system learners across the Philippines.

For School Principals, it is recommended that they serve as instructional leaders who actively champion and support technology integration efforts within ALS programs. They should create enabling environments where alternative learning system teachers feel empowered and confident in utilizing digital tools. This includes setting up peer mentoring programs, allocating school resources to maintain ICT equipment, and ensuring that alternative learning system facilitators are given time and opportunities to engage in capacity-building activities. Principals should also foster a culture of innovation and collaboration by encouraging teachers to experiment with student-centered, technology-enhanced teaching strategies aligned with constructivist and socially interactive models of learning.

For Teachers, particularly alternative learning system facilitators, the recommendation is to continuously enhance their digital literacy and pedagogical competence. As the study revealed that domains such as confidence in technology use and experience with computer technologies significantly affect alternative learning system implementation, teachers should seek training opportunities and engage in reflective practice regarding their use of ICT in alternative learning settings. They must also design learning experiences that are adaptive, interactive, and relevant to learners' real-world contexts. Embracing the value of technology integration not only enhances student learning outcomes but also affirms their role in building equitable and future-ready education.

For Future Researchers, it is recommended to explore further the long-term impact of technology integration on learner performance and engagement in alternative learning system programs. While this study has established a significant correlation and influence, qualitative or mixed-method research could uncover deeper insights into the lived experiences of alternative learning system learners and facilitators with technology. Future research should aim to contribute to theory-building and policy development by addressing gaps in the integration of technology in non-formal education sectors.

REFERENCES

1. *Anderman, E. M., & Anderman, L. H. (2019). Psychology of classroom learning: An encyclopedia. Detroit, MI: Macmillan Reference USA.*
2. *Apuke, O. D. (2017). Quantitative research methods: A synopsis approach. Arabian Journal of Business and Management Review, 6(10), 40-47.*
3. *Berman, L. (2019). Social Emotional Learning. Retrieved from: http://www.wa- schoolcounselor.org/Files/Bermanwsca2019%20elementarycounselors.pdf.*
4. *Bickford, D. M., & Reynolds, N. (2022). Activism and service-learning: Reframing volunteerism as acts of dissent. Pedagogy: Critical Approaches to Teaching Literature, Language, Composition, and Culture, 2(2), 229-252. https://doi.org/10.1215/15314200-2-2-229*
5. *Brackett, M. A. (2019). Permission to Feel: Unlocking the Power of Emotions to Help Our Kids, Ourselves, and Our Society Thrive. Celadon Books.*
6. *Brackett, M. A., & Cipriano, C. (2020). Teacher social and emotional competence: The heart of school improvement. American Educator, 44(2), 12-22.*
7. *CASEL. (2021). Core SEL Competencies. Retrieved from: http://www.casel.org/core-competencies/.*

8. *Castroverde, F. A., & Acala, M. D. (2021). Teaching-learning modality preferences of teachers and students in the new normal. Journal of Pedagogical Research, 5(2), 195-204.*
9. *Claro, S., Paunesku, D., & Dweck, C. S. (2020). Growth mindset tempers the effects of poverty on academic achievement. Proceedings of the National Academy of Sciences, 113(31), 8664-8668.*
10. *Connolly, M. (2020). Social awareness: Empathy and ethical behavior in the classroom. Transforming Education. https://www.transformingeducation.org*
11. *Davis, B. A. (2021). Descriptive correlational research: Defining variables and relationships. Journal of Educational Research, 98(4), 12-20.*
12. *Department of Education (DepEd). (2020). DepEd Order No. 13, s. 2020. Implementing Guidelines on Learning Modalities for the Formal Education. Manila: Department of Education.*
13. *Duckworth, A. L. (2019). Grit: The power of passion and perseverance. Scribner.*
14. *Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2021). The impact of enhancing students' social and emotional learning: A meta- analysis of school-based universal interventions. Child Development, 82(1), 405- 432.*
15. *Dweck, C. (2020). Mindset. Retrieved from: https://mindsetonline.com/whatisit/about/in- dex.html.*
16. *Eklund, K., Kilpatrick, K. D., Kilgus, S. P., & Haider, A. (2020). A systematic review of state-level social-emotional learning standards: Implications for practice and research. School Psychology Review, 49(4), 459-475.*
17. *Elias, M. J. (2021). Promoting social and emotional learning: Guidelines for educators. Education Leadership Review, 29(2), 45-55.*
18. *Enright, R. D., Lapsley, D. K., & Shukla, D. G. (1979). Adolescent egocentrism in early adolescence and social-cognitive development. Journal of Youth and Adolescence, 8(3), 249-261. https://doi.org/10.1007/BF02087592*
19. *Fallon, C. (2020). The role of resilience in academic achievement: A meta-analytic review. Journal of Educational Psychology, 112(2), 263-283.*
20. *Frey, N., Fisher, D., & Smith, D. (2019). All learning is social and emotional: Helping students develop essential skills for the classroom and beyond. ASCD.*
21. *George, B. (2019). Know Thyself: How to Develop Self-Awareness. Psychology Today.*
22. *Goleman, D. (2018). Emotional intelligence: Why it can matter more than IQ. Bantam Books.*
23. *Gonida, E. N., Karabenick, S. A., Makri, K., & Benetos, K. (2019). Help-seeking in students with low academic performance: The role of motivation and affect. Contemporary Educational Psychology, 58, 1–10.*
24. *Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., & Allen, W. R. (2022). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. The Review of Higher Education, 25(3), 321-344. https://doi.org/10.1353/rhe.2002.0013.*
25. *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.*
26. *Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2019). Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of a randomized controlled trial. Journal of Educational Psychology, 103(3), 622-637.*
27. *Jones, S. M., Bailey, R., Brush, K., & Kahn, J. (2020). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. American Educational Research Association.*
28. *Iraola-Real, I. (2021). Positive and negative affects: The importance of the emotions in university students. European Proceedings of Social and Behavioural Sciences, 112, 29–38.*
29. *Kabir, S. M. S. (2019). Basic guidelines for research: An introductory approach for all disciplines. Book Zone Publication.*
30. *Kagan, S. (2019). Kagan Structures for Emotional Intelligence. Kagan Publishing.*
31. *Karabenick, S. A., & Gonida, E. N. (2018). Academic help seeking as a self- regulated learning strategy. In D. H. Schunk & J. A. Greene (Eds.), Handbook of self-regulation of learning and performance (2nd ed., pp. 421–433). New York: Routledge.*
32. *Lavy, S., & Naama-Ghanayim, E. (2020). Teachers' social-emotional competencies: A qualitative systematic review of the literature. Review of Education, 8(1), 59-92.*
33. *Leger, K. A., Charles, S. T., & Almeida, D. M. (2020). Positive affect and negative emotional responses to daily stressors. Innovation in Aging, 4(S1), 638–638.*
34. *Mallick, M. K., & Kaur, S. (2019). Academic resilience: A perspective on students' achievement under adversity. International Journal of Psychology and Behavioral Sciences, 10(3), 100-108.*
35. *Martin, A. J. (2023). Academic buoyancy and academic resilience: Exploring 'everyday' and 'classic' resilience in the face of academic adversity. School Psychology International, 34(5), 488-500.*
36. *Martin, A. J., & Marsh, H. W. (2019). Academic resilience and its psychological and educational correlates: A construct validity approach. Psychology in the Schools, 45(3), 259-272.*
37. *McLafferty, M., Mallett, J., & McCauley, V. (2019). Measuring resilience: A necessary skill for school success. Educational Psychology Review, 24(2), 203- 219.*

38. *Miranda, C. A., Salva, E. M., & Geronimo, J. Y. (2021). Emotional distress among students in the Philippines during COVID-19. Asia-Pacific Journal of Research in Early Childhood Education, 15(1), 23-45.*
39. *Oberle, E., Domitrovich, C. E., Meyers, D. C., & Weissberg, R. P. (2020). Establishing systemic social and emotional learning approaches in schools: A framework for schoolwide implementation. Cambridge Journal of Education, 50(2), 99-117.*
40. *OECD. (2021). Skills for 21st century learners. Organisation for Economic Co- operation and Development. https://www.oecd.org.*
41. *Organisation for Economic Co-operation and Development (OECD). (2019). PISA 2018 results. OECD Publishing.*
42. *OSU Motivation in Classrooms Lab. (2022). Motivation and self-regulated learning: Teaching strategies for academic resilience.*
43. *Pekrun, R., & Perry, R. P. (2021). Control-value theory of achievement emotions. In R. Pekrun & L. Linnenbrink-Garcia (Eds.), Handbook of emotions in education (2nd ed., pp. 61–75). Routledge.*
44. *Rezapour Mashhadi, M. M., Dehzangi, A., & Saadati, F. (2022). Students' negative emotions and their rational and irrational behaviors during COVID-19 outbreak. PLOS ONE, 17(3), e0264985.*
45. *Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivations: Classic definitions and new directions. Contemporary Educational Psychology, 25(1), 54- 67.*
46. *Schonert-Reichl, K. A. (2019). Social and emotional learning and teachers. The Future of Children, 29(1), 137-155.*
47. *Transforming Education. (2020). Building social awareness in schools.*
48. *Tsui, L. (2020). Effects of campus climate on students' critical thinking skills: A multilevel analysis. Research in Higher Education, 41(4), 423-442.*
49. *White, M. C., & Bembenutty, H. (2018). Self-regulation and help-seeking in high school mathematics: Associations with achievement and motivation. Learning and Individual Differences, 27, 45–54.*
50. *Zinsser, K. M., Shewark, E. A., Denham, S. A., & Curby, T. W. (2021). Teachers' emotional competence and its importance to pre-k teacher-child interactions. Early Childhood Research Quarterly, 29(4), 131-142.*