



# CULTURALLY RESPONSIVE LEADERS AND TEACHERS' INTRAPERSONAL TECHNOLOGY INTEGRATION IN GOV GEN NEW DISTRICT IN DAVAO ORIENTAL DIVISION

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## ABSTRACT

This study aimed to determine the significant relationship between culturally responsive leaders and intrapersonal technology integration among teachers in the Division of Davao Oriental. Using a descriptive-correlational research design, the study involved 130 selected teacher-respondents and employed validated and pilot-tested research instruments. Statistical tools such as weighted mean, Pearson product-moment correlation, and multiple regression analysis were used to analyze the data. Results revealed that both culturally responsive leadership and intrapersonal technology integration were rated at an extensive level, indicating that these practices are oftentimes evident among teachers. The findings further revealed a significant positive relationship between culturally responsive leaders and intrapersonal technology integration, leading to the rejection of the null hypotheses. Specifically, the domains of culturally responsive leadership, inclusiveness, development, validation, and cultivation, were found to significantly influence intrapersonal technology integration. Among these, inclusiveness had the strongest predictive value. These findings emphasize the critical role of culturally responsive leadership in enhancing teachers' confidence, motivation, and interest in integrating technology into their professional practices. The study underscores the need for continuous leadership development and technological capacity-building to promote equity and innovation in education. Recommendations were made for educational leaders, school administrators, teachers, and future researchers to further strengthen these essential components of effective 21st-century education.

**KEYWORDS:** *Culturally Responsive Leadership; Intrapersonal Technology Integration; Inclusiveness; Teacher Leadership; Educational Equity.*

## INTRODUCTION

Education in the 21st century demands both technological adaptability and cultural responsiveness, particularly in diverse learning environments. As schools evolve, educational leaders are called to foster inclusivity, while teachers must effectively integrate digital tools to enhance instruction. Culturally responsive leadership acknowledges and values diverse student backgrounds, promoting inclusive learning spaces. At the same time, teachers' self-efficacy in technology integration reflects their confidence in using digital tools to support student engagement and achievement.

Despite growing awareness of these critical elements, many educators continue to face challenges in harmonizing culturally responsive practices with meaningful technology use. Globally, disparities in professional development and access to resources hinder the consistent implementation of inclusive and tech-integrated teaching (Khalifa, 2020; Dong et al., 2020). In the Philippine context, efforts such as the K to 12 curriculum have encouraged digital integration, yet gaps remain in teacher training and confidence, particularly in addressing cultural diversity (Aquino, 2019; Caingcoy, 2023).

Within the Davao Oriental Division, these issues are further magnified. Teachers often lack sufficient support for both technology use and culturally inclusive pedagogy, compounded by limited localized training and the absence of policies addressing cross-cultural dynamics in schools (Gardoce et al., 2021; Mercado, 2021). This study aims to explore the intersection of culturally responsive leadership and teacher self-efficacy in technology integration, identifying strategies to create inclusive, innovative learning environments tailored to the region's diverse educational landscape.



## REVIEW OF SIGNIFICANT LITERATURE

This study explores the relationship between culturally responsive leadership and intrapersonal technology integration among educators. The independent variable, culturally responsive leadership, is defined through four indicators: inclusiveness, development, validation, and cultivation (Hines, 2022). The dependent variable, intrapersonal technology integration, includes self-efficacy, performance outcome expectations, self-evaluative and social outcome expectations, and interest (Niederhauser & Perkmén, 2018).

Culturally responsive leadership has gained prominence as schools become increasingly diverse. It involves affirming student identities, addressing systemic inequities, and creating inclusive school environments. Leaders play a vital role in shaping policies and practices that promote equity, inclusion, and student engagement (Khalifa et al., 2019; Hopf et al., 2021). An example of such leadership is demonstrated by Dr. Gregory Hutchings in Alexandria, Virginia, where inclusive policies, community collaboration, and a focus on dismantling systemic racism were central to transforming the school system (Mello-Klein, 2020).

Inclusiveness is reflected in leadership practices that integrate cultural diversity into curricula, hiring, extracurricular activities, and partnerships with community organizations. These initiatives promote representation and equity while enhancing students' sense of belonging and engagement (Gay, 2018; Santamaría & Santamaría, 2019). Development focuses on providing professional learning opportunities that build educators' cultural competence and align with the school's mission and goals (Hopf et al., 2021; Paris & Alim, 2017). Validation refers to aligning school policies and instructional practices with students' lived experiences to create affirming, equitable learning environments (Gay, 2018; Ishimaru, 2020). Despite the increasing importance of culturally responsive leadership, there is still a lack of validated tools to measure its effectiveness and inform leadership development efforts (Madhlangobe & Gordon, 2022).

Intrapersonal technology integration refers to the internal psychological and motivational factors that influence educators' use of technology, including self-efficacy, outcome expectations, and interest (Lent et al., 2022). Self-efficacy, rooted in Bandura's social cognitive theory, reflects an individual's confidence in their ability to use instructional technology effectively and adapt it to enhance student learning (Schunk, 2021). Educators with high self-efficacy are more likely to engage with technology creatively, align it with pedagogical goals, and support students through technological challenges (Tondeur et al., 2020). Outcome expectations—beliefs that using technology will lead to desirable results such as improved student performance or recognition—also influence teachers' motivation to adopt digital tools (Lent et al., 2022; Pajares, 2018). Interest, which is shaped by both self-efficacy and anticipated outcomes, serves as a key driver for technology adoption, promoting exploration and innovative use (Bandura, 1986; Reynolds, 2020).

Although extensive research has been conducted on classroom-based technology integration, studies focusing on the internal dispositions of educators—especially school leaders—remain limited. The broader institutional and contextual factors such as access to resources and leadership support must be considered alongside these intrapersonal elements (Ertmer, 1999; Hines, 2022). Addressing both the psychological and structural dimensions is essential to fully support teachers in integrating technology effectively in culturally diverse settings.

In summary, the literature underscores the interconnectedness of culturally responsive leadership and intrapersonal technology integration. By fostering inclusive, equity-centered leadership and supporting educators' internal confidence and motivation, schools can create learning environments that are both culturally affirming and technologically innovative.

## STATEMENT OF THE PROBLEM

This study determined the relationship between the intrapersonal technology integration and culturally responsive leader. More specifically, it sought to answer the following questions:

1. What is the extent of culturally responsive leaders in terms of:
  - 1.1. Inclusiveness;
  - 1.2. Development;
  - 1.3. Validation; and
  - 1.4. Cultivation?
2. What is the extent of intrapersonal technology integration in terms of:
  - 2.1. Self-efficacy;
  - 2.2. Performance outcome expectations;
  - 2.3. Self-evaluative outcome expectations;



- 2.4 Social outcome expectations; and
- 2.5 Interest?
- 3. Is there a significant relationship between the culturally responsive leaders and intrapersonal technology integration?
- 4. Which of the domains of the culturally responsive leaders significantly influence intrapersonal technology integration?

### 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 employed a quantitative research approach, specifically utilizing a descriptive correlational design. Quantitative methods allow for the systematic collection and analysis of numerical data to examine trends and relationships (Apuke, 2017). The descriptive component focused on identifying the levels of intrapersonal technology integration and culturally responsive leadership among educators, while the correlational aspect explored the relationship between the two variables without manipulation of the research environment (Creswell & Creswell, 2017; Korrapati, 2019). This design is well-suited to the study’s aim of understanding how intrapersonal technology-related competencies relate to culturally responsive leadership practices in real-world educational settings (Davis, 2021).

### Ethical Considerations

Ethical safeguards were observed throughout the research process to protect the rights and welfare of participants. Informed consent was obtained after explaining the study’s purpose, procedures, and voluntary nature. To address potential professional vulnerability, anonymity and confidentiality were strictly maintained, ensuring that responses could not be linked to individual teachers or schools. Data was anonymized, stored securely, and accessed only by the researcher.

This study holds social value by contributing to the understanding of how technological self-efficacy among educators influences culturally inclusive leadership. Findings aim to inform professional development, policy, and curriculum design for equitable and technology-supported education.

Risks to participants were minimal and primarily related to professional discomfort. These were mitigated by using a non-intrusive survey and ensuring voluntary participation. Fairness was upheld through transparent selection criteria and stratified random sampling, ensuring diverse representation.

Transparency was maintained through open communication with participants, including pre-survey briefings and post-study sharing of results. Research facilities, including secure online platforms and private spaces for data collection, supported the integrity of the study. Community engagement was encouraged through collaboration with school leaders and the dissemination of findings through forums and development sessions.

The researcher’s qualifications in educational research and ethics, along with oversight from a research ethics committee, ensured adherence to institutional and national guidelines. Potential conflicts of interest were disclosed, and data interpretation remained objective and evidence-based.

### RESEARCH RESPONDENTS

In this study, the research respondents consist of 130 elementary teachers selected from a total population of 213 teachers across three big and medium-sized elementary schools in the Division of Davao Oriental. The sample size was determined using Slovin’s formula, which is widely used in educational and social research to determine an appropriate sample size from a given population while ensuring statistical validity. The formula is expressed as:  $n = \frac{N}{1 + Ne^2}$  where  $n$  is the required sample size,  $N$  is the total population (213), and  $e$  is the margin of error (0.05) The computed sample size of 130 ensures that the findings are representative of the entire teacher population while minimizing sampling bias and maintaining a reasonable margin of error (Taherdoost, 2017).

To ensure that the sample accurately reflects the characteristics of the teacher population, specific inclusion criteria were established. Respondents must have at least three years of teaching experience to ensure that they have sufficient exposure to the integration of intrapersonal technology and culturally responsive leadership in their



instructional practices (Anderson & Dron, 2021). Also, teachers must be actively engaged in classroom instruction during the study period, as their insights into technology integration and leadership practices are essential in understanding the research variables (Ertmer & Ottenbreit-Leftwich, 2020).

The selected respondents play a crucial role in this study, as they provide valuable insights into the challenges and effectiveness of intrapersonal technology integration and culturally responsive leadership in elementary education. By selecting teachers with relevant teaching experience, the study ensures the validity and reliability of the data collected, contributing to a more comprehensive understanding of the research problem within the context of Davao Oriental.

**RESEARCH INSTRUMENTS**

The primary instrument for data collection was a structured questionnaire designed to measure both, intrapersonal technology integration and culturally responsive leaders. 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 culturally responsive leaders. The second set focused on the extent of intrapersonal technology integration.

**Culturally Responsive Leaders.** The culturally responsive leader’s questionnaire was adapted from Hines, M. T. (2022). The instrument consisted of 22 items. It had four indicators namely; inclusiveness (1-5), development (1-6), validation (1-5), and cultivation (1-6).

The culturally responsive leader’s questionnaire, adapted from Hines (2022), was similarly subjected to pilot testing. The reliability analysis yielded a Cronbach’s alpha coefficient of 0.92, demonstrating excellent internal consistency among the items. This suggests that the instrument effectively measures the extent to which inclusiveness, development, validation, and cultivation are evident in leadership practices. The findings of the pilot testing validate the questionnaire as a robust tool for assessing the dependent variable of this study. The strong reliability score underscores its appropriateness for capturing nuanced aspects of culturally responsive leadership, supporting the accurate analysis and interpretation of data in the main study. Below was the grading scale of the extent of culturally responsive leaders.

Mean Interval	Descriptive Level	Descriptive Interpretation
4.20 - 5.00	Very Extensive	Culturally responsive leaders is always evident.
3.40 - 4.19	Extensive	Culturally responsive leaders is oftentimes evident.
2.60 - 3.39	Moderately Extensive	Culturally responsive leaders is occasionally evident.
1.80 - 2.59	Less Extensive	Culturally responsive leaders is seldom evident.
1.00 – 1.79	Not Extensive	Culturally responsive Leaders is never evident.

**Intrapersonal Technology Integration.** The intrapersonal technology integration questionnaire was adapted from Niederhauser & Perkmen (2018). The instrument consisted of 21 items. It had five indicators namely; self-efficacy (1-6), performance outcome expectations (1-3), self-evaluative outcome expectations (1- 3), social outcome expectations (1-3), and interest (1-6).

The intrapersonal technology integration questionnaire, adapted from Niederhauser and Perkmen (2018), was subjected to pilot testing to ensure its reliability and validity before full-scale implementation. The instrument was evaluated for internal consistency. The pilot test yielded a Cronbach’s alpha coefficient of 0.89, indicating a high level of reliability and suggesting that the items within the questionnaire consistently measure the underlying constructs. This result implies that the instrument is well-suited for capturing teachers’ perceptions of their self-efficacy, performance outcome expectations, self-evaluative outcome expectations, social outcome expectations, and interest in technology integration. The high internal consistency ensures that the instrument can reliably contribute to understanding the independent variable of this study. Below was the grading scale of the extent of intrapersonal technology integration.



Mean Interval	Descriptive Level	Descriptive Interpretation
4.20 - 5.00	Very Extensive	The intrapersonal technology integration is always evident.
3.40 - 4.19	Extensive	The intrapersonal technology integration is oftentimes evident.
2.60 - 3.39	Moderately Extensive	The intrapersonal technology integration is occasionally evident.
1.80 - 2.59	Less Extensive	The intrapersonal technology integration is seldom evident.
1.00 – 1.79	Not Extensive	The intrapersonal technology integration 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.

## RESULTS AND DISCUSSIONS

The study’s findings align with key educational theories, notably constructivist learning theory, which posits that knowledge is actively constructed through experience and social interaction (Piaget; Vygotsky). The predictive influence of inclusiveness ( $\beta = 0.385$ ) and validation ( $\beta = 0.202$ ) reflects how culturally responsive leaders foster personalized, context-driven environments that support meaningful engagement with technology. As Jonassen and Land (2022) emphasize, digital tools in such settings enable experiential learning shaped by cultural and contextual realities.

The results also support Bandura’s social learning theory, where individuals learn through observation and modeling. Leadership behaviors—particularly in inclusiveness and cultivation ( $\beta = 0.234$ )—serve as observable models for teachers, encouraging self-directed technology use and professional growth. This mirrors Bandura’s (1986) view that modeling desirable actions leads to behavioral adoption in organizational settings (Bates, 2019). Moreover, the findings resonate with Mezirow’s transformational learning theory, which emphasizes critical reflection as a catalyst for behavioral and perceptual change. Leadership domains like development ( $\beta = 0.198$ ) and cultivation foster reflective spaces, prompting educators to reassess beliefs about culture, equity, and technology use. Such experiences, as noted by Mezirow (2000) and Taylor and Cranton (2019), facilitate deep, value-driven transformation.

Overall, the study’s strong explanatory power ( $R^2 = 0.700$ ) underscores that meaningful intrapersonal technology integration is deeply influenced by leadership practices rooted in constructivism, social learning, and transformational learning. These frameworks collectively highlight that culturally responsive leadership is key to fostering inclusive, reflective, and adaptive technology use in schools.

## 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 culturally responsive leaders and intrapersonal technology integration. The study was conducted with the selected teachers from the Division of Davao Oriental. There were one hundred thirty (130) 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 culturally responsive leaders of the teachers is extensive. Meanwhile, the extent of the intrapersonal technology integration of the teachers is also extensive. It was found that there is a significant relationship between culturally responsive leaders and the intrapersonal technology integration. The hypotheses of no significant relationship between culturally responsive leaders and intrapersonal technology integration and none of the domains of culturally responsive leaders significantly influence the intrapersonal technology integration were rejected.



### Conclusions

Based on the findings of this study, the following conclusions were offered:

The extent of culturally responsive leaders is extensive, which implies that it is oftentimes evident. All dimensions of culturally responsive leaders which include inclusiveness, development, validation, and cultivation, are at an extensive level, which means it is oftentimes evident. Meanwhile, the extent of intrapersonal technology integration is also extensive, which means that it is oftentimes evident. All dimensions of intrapersonal technology integration are oftentimes evident. Both variables call for all school members to work hand in hand to strengthen the existing status of the culturally responsive leaders and intrapersonal technology integration.

Based on the findings, culturally responsive leaders, and intrapersonal technology integration are correlated. Also, culturally responsive leaders significantly influences intrapersonal technology integration. All domains of culturally responsive leaders, namely, inclusiveness, development, validation, and cultivation significantly influence intrapersonal technology integration 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 four domains of culturally responsive leaders, intrapersonal technology integration also increases.

### Recommendations

Based on the study's findings, several recommendations are proposed:

**For the Department of Education**, it is essential to institutionalize culturally responsive leadership as a core element in leadership development programs. National and regional training should emphasize inclusiveness, development, validation, and cultivation, while investing in sustainable, culturally sensitive technology integration initiatives. Providing context-aware, equity-focused professional development is vital for fostering adaptive digital learning environments.

**For school principals**, the study underscores their role as models of culturally responsive leadership. They should promote inclusive school cultures where technology honors diversity, encourage collaborative platforms like learning action cells, and support reflective, continuous professional growth to enhance technology integration among teachers.

**For teachers**, there is a need to integrate cultural responsiveness into their instructional use of technology. By validating students' cultural backgrounds and engaging in ongoing professional development, teachers can foster inclusive, tech-enhanced learning experiences and actively contribute to their school's digital and cultural transformation.

**For future researchers**, expanding the scope to include diverse regions and educational levels is encouraged. Future studies may explore long-term effects on digital equity and student outcomes, using qualitative or mixed methods to better understand how leadership practices translate into classroom-level technology use.

Strengthening the intersection of culturally responsive leadership and technology integration is both a strategic and ethical necessity in today's diverse educational landscape.

### REFERENCES

1. Alenezi, A. (2022). *Teachers' outcome expectations and technology adoption: Insights from digital learning environments*. *International Journal of Educational Technology*, 19(3), 211-225.
2. Ali, A., Haider, Z., & Munir, F. (2020). *Examining self-efficacy and technology integration in education: A study of teachers' behavior*. *Journal of Educational Technology Development and Exchange*, 13(2), 78-95.
3. Alipio, M. (2020). *Education during pandemic era: Are learners in a less- economically developed country ready for e-learning?* *Journal of Learning for Development*, 7(3).
4. Apuke, O. D. (2017). *Quantitative research methods: A synopsis approach*. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, 6(10), 40-47.
5. Aquino, L. M. (2019). *Self-efficacy on technological, pedagogical and content knowledge (TPACK) of teacher education faculty in region III*. *Asia Pacific Journal of Multidisciplinary Research*, 3(4), 151-158.
6. Bagui, R., Lorenzo, R., & Pante, M. (2021). *Digital divide in Philippine education: A socio-cultural perspective*. *Philippine Journal of Education and Technology Studies*.
7. Bates, A. W. (2019). *Teaching in a digital age: Guidelines for designing teaching and learning (2nd ed.)*. BCcampus.
8. Caingcoy, M. E. (2023). *Review culturally responsive leadership in higher education milieu: A literature review*. *Diversitas Journal*, 8(3), 3058-3072.
9. Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.)*. Sage publications.
10. Darling-Hammond, L., Hyster, M. E., & Gardner, M. (2020). *Effective teacher professional development*. *Journal of Teacher Education*.



11. Davis, C. (2021). *Descriptive research designs: Definitions, characteristics, and examples*. *Research Journal of Social Sciences and Humanities*, 12(3), 1–12.
12. DepEd. (2019). *Towards culturally responsive education for IP learners*. Department of Education.
13. Department of Education (DepEd). (2023). *Enhancing technology in the education system in the Philippines*.
14. Dong, Y., Xu, C., & Chai, C. S. (2020). Exploring the structural relationship among teachers' technostress, technological pedagogical content knowledge (TPACK), computer self-efficacy and school support. *Asia Pacific Education Review*, 21(4), 647-661.
15. Driscoll, M. P. (2019). *Psychology of learning for instruction (4th ed.)*. Pearson.
16. Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2020). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 52(1), 3–16.
17. Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2020). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 52(1), 3–16.
18. Gardoce, A. M., Rungduin, T. T., & Pañares, Z. D. (2021). Technological pedagogical knowledge self-efficacy and continuance intention of Philippine teachers in remote education. *International Journal of Educational Technology in Higher Education*, 18(1), 1-20.
19. Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice (3rd ed.)*. Teachers College Press.
20. Hines, M. T. (2022). *Culturally responsive leadership practices in education*.
21. Hopf, D., McFadden, K., & Robinson, J. (2021). Understanding cultural responsiveness in education. *Journal of Multicultural Education*, 15(3), 147–161.
22. Ishimaru, A. M. (2020). *Just schools: Building equitable collaborations with families and communities*. Teachers College Press.
23. Jonassen, D. H., & Land, S. M. (2022). *Theoretical foundations of learning environments*. Routledge.
24. Jones, W. M., & Dexter, S. (2020). Transformational leadership and the integration of technology in education. *Educational Technology Research and Development*, 68(4), 203–222.
25. Khalifa, M. A., Gooden, M. A., & Davis, J. E. (2019). Culturally responsive school leadership: A synthesis of the literature. *Review of Educational Research*, 86(4), 1272–1311.
26. Kimmons, R., Graham, C. R., & West, R. E. (2020). The benefits and challenges of technology integration in teacher education. *Journal of Digital Learning in Teacher Education*, 36(3), 120–134.
27. Koehler, M. J., Mishra, P., & Cain, W. (2021). The TPACK framework: Innovation in integrating technology with culturally responsive teaching. *Journal of Research on Technology in Education*, 53(1), 101–118.
28. Korrapati, R. (2019). *Descriptive research methodology*. *International Journal of Advanced Research in Education and Technology*, 3(3), 11–14.
29. Kumar, P., Kumar, A., & Arora, P. (2021). Exploring teachers' self-efficacy for technology integration in classrooms. *Computers & Education*, 168, 104212.
30. Lent, R. W., Brown, S. D., & Hackett, G. (2022). *Social cognitive career theory*. In D. Brown & R. W. Lent (Eds.), *Career choice and development (4th ed., pp. 255–311)*. Wiley.
31. Madhlangobe, L., & Gordon, S. P. (2022). Culturally responsive leadership in a diverse school: A case study of a high school leader. *NASSP Bulletin*, 96(3), 177–202.
32. Mello-Klein, C. (2020). Alexandria's troubled racial past and the ongoing struggle for equality. *Alexandria Times*.
33. Mercado, M. (2021). Assessing practice teachers' culturally responsive teaching: The role of teacher education curriculum and pedagogy. *IAFOR Journal of Cultural Studies*, 6(1), 45-60.
34. Montes, J., De Guzman, M., & Santos, A. (2022). Leadership challenges in culturally diverse classrooms: A Philippine perspective. *Journal of Southeast Asian Education Research*.
35. Niederhauser, D., & Perkmen, S. (2018). Validation of the intrapersonal technology integration scale: Assessing the influence of intrapersonal factors that influence technology integration. *Journal of Research on Technology in Education*, 50(1), 13-28.
36. Ong, A., Castillo, R., & Baltazar, J. (2020). Impact of digital tools on learning in public schools: The Philippine experience. *Asia-Pacific Education Review*.
37. Pajares, F. (2018). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543–578.
38. Panabo City Department of Education. (2023). *Local educational challenges and technology integration report*.
39. Paris, D., & Alim, H. S. (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.
40. Reynolds, R. (2020). Teacher motivation and interest in technology integration. *Journal of Educational Technology Research*, 18(1), 45-61.
41. Sanders, M. G., & Harvey, A. (2022). Beyond the school walls: A case study of principal leadership for school-community collaboration. *Teachers College Record*, 104(7), 1345–1368.
42. Schunk, D. H. (2021). Self-regulation through goal setting. *Theory into Practice*, 41(2), 64–70.
43. Sleeter, C. E. (2020). Preparing teachers for culturally sustaining pedagogy. *Multicultural Education Review*, 12(2), 71–84.
44. Smith, J. A. (2021). Exploring the role of self-efficacy in teachers' technology integration. *Educational Technology Quarterly*, 30(4), 332–349.
45. Taherdoost, H. (2019). Sampling methods in research methodology; how to choose a sampling technique for research. *International Journal of Academic Research in Management*, 5(2), 18-27.



47. Taylor, E. W., & Cranton, P. (2019). *The handbook of transformative learning: Theory, research, and practice*. Wiley.
48. Tondeur, J., van Braak, J., Ertmer, P. A., & Ottenbreit-Leftwich, A. (2020). Understanding the importance of teachers' technology use self-efficacy. *Educational Technology Research and Development*, 68(4), 235-255.
49. Trust, T., Carpenter, J. P., & Krutka, D. G. (2021). Collaborative professional development for technology integration: A case study of a teacher learning community. *Journal of Digital Learning in Teacher Education*, 37(1), 28-41.
50. U.S. Department of Education, National Center for Education Statistics. (2018). *The condition of education 2018*. <https://nces.ed.gov>
51. Vespa, J., Medina, L., & Armstrong, D. M. (2018). *Demographic turning points for the United States: Population projections for 2020 to 2060*. U.S. Census Bureau.
52. Young, M. D., Mountford, M., & Skrla, L. (2020). *Handbook of research on the education of school leaders*. Routledge.