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Educators' Resilience Amidst Digital Era Challenges: Case Study in Indonesia



Abstract: - This study aims to explore the coping mechanisms and resilience strategies employed by educators in response to the multifarious challenges posed by the digital era in Indonesia. The research objective centers on identifying and analyzing the various adaptive measures educators implement to maintain efficacy and well-being amidst the evolving educational landscape. A qualitative approach with case study research method was employed, focusing on a diverse group of ten educators, each facing distinct challenges. These informants were selected to provide a broad perspective on the resilience strategies utilized in various educational contexts. Data were collected through in-depth interviews, non-participative observation, and document study ensuring a rich and nuanced understanding of the educators' experiences. The analysis was conducted using a thematic approach, identifying recurring patterns and strategies across the informants' narratives. The research findings underscore the complexity of educators' resilience in the digital era. It reveals that educators' resilience is multifaceted, extending beyond mere technological adaptation. It encompasses a blend of emotional intelligence, interpersonal skills, and continuous learning, all of which are crucial in navigating the intricacies of modern educational environments. The study sheds light on the indispensable role of resilience and adaptability for educators in the digital age, providing valuable insights for educational institutions aiming to support their staff effectively.

Keywords: Educators, Resilience, Digital Era Challenges, Indonesian Teachers

INTRODUCTION

The advent of the digital era has precipitated a paradigm shift in educational landscapes globally, presenting a multitude of challenges and opportunities for educators [1]–[3]. This seismic shift has necessitated an unprecedented level of adaptability and resilience among teaching professionals. The ability to navigate these changes effectively is not merely a function of technological proficiency but also hinges on educators' capacity to employ a diverse array of coping mechanisms and resilience strategies. The concept of resilience in the context of education has evolved to encompass a broad spectrum of behaviors, attitudes, and skills that educators deploy to manage and adapt to the demands and stresses of the profession [4], [5]. In the digital era, this includes adapting to new teaching modalities, integrating technology into the curriculum, and managing the complex dynamics of virtual classrooms [6]–[8]. Given the critical role of educators in shaping future generations, understanding the resilience mechanisms they employ is paramount. It not only aids in enhancing their well-being and efficacy but also ensures the continuity and quality of education in the face of rapid technological changes [9][10].

The onset of the digital era has transformed the educational landscape, introducing both challenges and opportunities. Technological advancements have redefined teaching methodologies, communication channels, and information accessibility. Digital literacy has become a critical competency for educators, necessitating continual professional development to keep abreast of emerging technologies and their pedagogical applications [3], [11], [12].

Resilience in educators is broadly understood as the capacity to thrive in the face of adversities commonly encountered in the teaching profession [13][5]. It encompasses personal qualities, professional competencies, and the ability to draw upon external support systems to navigate challenges effectively [14]. Resilience is not only crucial for educators' well-being but also impacts their effectiveness and the learning outcomes of their students [15].

Educators employ a variety of coping mechanisms and strategies to manage stress and challenges [16], [17]. These can range from problem-focused coping, such as seeking professional development opportunities, to emotion-focused coping, like engaging in hobbies or seeking social support [18]. The choice and effectiveness of these strategies are influenced by individual characteristics, workplace environment, and the nature of the challenges faced [16]–[18]. Educators in the digital era face specific challenges that require tailored coping mechanisms. These include technological barriers, cyberbullying, online classroom management, and the need for digital content creation and curation [3], [19], [20]. Additionally, the digital divide exacerbates inequities,

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presenting unique challenges for educators in under-resourced environments[2]. The rapid pace of change in the digital era necessitates a high degree of resilience among educators. They must not only adapt to new technologies but also navigate the complexities of virtual interactions and maintain student engagement in digital environments[8], [10], [21]. This new landscape requires educators to develop and employ resilience strategies that are responsive to the specific demands of the digital era.

While there is an extensive body of literature on educator resilience and coping strategies [16]–[18], there is a notable gap when it comes to the specific context of the digital era. Existing research often fails to address the unique challenges posed by technology integration in education and the resilience strategies required to navigate them effectively[22], [23]. This study aims to bridge this gap by providing insights into the coping mechanisms and resilience strategies employed by educators in the face of the digital era's specific demands. The central research question guiding this study is: "What are the challenges faced by educators in the digital era, and what coping mechanisms and resilience strategies do they employ to navigate these challenges?" The novelty of this research lies in its focus on the intersection of educator resilience and the digital era's specific demands.

I. METHOD

Adopting a qualitative approach, this research employed the case study method to offer a profound understanding of the experiences and perceptions of educators in Indonesia as they navigate the multifaceted challenges of the digital era. The combination of a qualitative lens and the case study method was purposefully chosen to capture the rich, contextualized experiences of educators and gain insights into their resilience strategies within the evolving digital educational landscape.

Ten educators, each with over a decade of teaching experience, served as the focal cases for this research, providing diverse insights from both urban and rural educational settings. Criteria for Informants: Selection was based on specific criteria to ensure richness and diversity in the data. These criteria included:

- A minimum of 10 years of teaching experience.
- Representation from both urban and rural settings.
- Active engagement with digital education initiatives or platforms.

Data collection techniques were varied, capturing a broad spectrum of experiences. Semi-structured interviews lasting approximately 45 to 60 minutes were at the forefront. While offering a structured guideline, these interviews provided flexibility for educators to share their unique narratives. Alongside interviews, non-participant observations in educators' teaching settings and a document study, including lesson plans, digital resources, and official communication records, were conducted. The interview protocol, observation checklist, and document review criteria underwent a rigorous validation process. Feedback from seasoned experts in qualitative research and digital education refined these instruments. A pilot interview with an educator not in the main study group further ensured the tools' effectiveness.

The qualitative data gathered from interviews, observations, and document studies were subjected to thematic analysis. The procedure followed Braun and Clarke's (2006) structured approach:

1. Familiarization: The data was repeatedly read to achieve immersion and intimate familiarity.
2. Initial Coding: Raw data was coded to create meaningful groups.
3. Searching for Themes: Initial codes were clustered to form overarching themes.
4. Reviewing Themes: Themes were refined, ensuring they reflected the coded data accurately.
5. Defining and Naming Themes: Each theme was defined, capturing its essence, and given a descriptive name.
6. Synthesis: A narrative was constructed around the themes, weaving together the patterns and insights discovered in the data.

Throughout the analysis, reflexivity was maintained. A journal documenting insights, potential biases, and reflections was kept ensuring the study's integrity and authenticity.

II. RESULTS AND DISCUSSIONS

From the empirical data, it is found the challenges and resilience of Indonesian educators are as follows.

Educator 1 Challenges and Resilience

Educator 1's transition into the digital teaching landscape wasn't without its hurdles. He encountered the demanding task of simultaneously managing online teaching sessions. Expressing the intricacies of this challenge, he mentioned, "At that time, when the Zoom session for my Professional Teacher Education Program (PPG) coincided with my teaching hours, I found it difficult to focus on teaching in class." Despite the evident complexity, Educator 1's resilience shone through. He adeptly navigated the digital tools at his disposal and placed a strong emphasis on maintaining regular and effective communication to ensure seamless class

management. By ensuring he was consistently available and communicative, he managed to uphold the educational standards, even in a virtual environment.

Contemporary research underscores the challenges educators face when adapting to the nuances of remote teaching, especially in settings previously unacquainted with digital pedagogy[24], [25]. Educator 1's proactive communication strategy aligns with the insights of [26], who emphasize the crucial role of transparent communication in the success of online pedagogy. Moreover, [27], [28] suggest that proactive communication, coupled with effective utilization of digital tools, can substantially mitigate the challenges inherent in online teaching. This sentiment resonates with the strategies employed by Educator 1.

Educator 2 Challenges and Resilience

Educator 2 faced a unique set of challenges. One of the major difficulties she highlighted was balancing the demands of her studies with her responsibilities as an educator. She shared, "When I participated in the Professional Teacher Education Program (PPG), especially during Zoom sessions, it often clashed with my teaching hours, making it hard to concentrate on my class." This reflects a challenge of juggling multiple commitments. However, the resilience Educator 2 showcased is commendable. Not only did she actively seek support from her peers, but she also engaged in open dialogue with her students' parents to ensure they were aware of the circumstances. Her proactive approach, which involved briefing parents about her commitments, ensured that there was mutual understanding and support. This effort underlines her dedication to her students and her commitment to ensuring minimal disruption to their learning.

Balancing multiple roles and responsibilities, especially in a digital landscape, is a challenge many educators face[29]. Educator 2's approach to this challenge, focusing on open communication and seeking collaborative support, mirrors the strategies suggested by [30], [31]. Their research underscores the importance of community support in enhancing an educator's efficacy. Further, the proactive approach of briefing parents and setting expectations is in line with findings by [32]–[35], who advocate for the role of parental involvement and understanding in successful digital education.

Educator 3: Challenges and Resilience

Educator 3 conveyed the challenges posed by the rapid integration of technology into the educational sector. "The sudden shift to online learning due to the pandemic was a big challenge. I wasn't familiar with many online tools, and it was overwhelming at first," she recounted. This transition, while necessary, brought about a steep learning curve for many educators, with Educator 3 being no exception. However, her resilience is evident in her proactive attitude towards this challenge. She stated, "I attended training sessions, sought advice from younger colleagues more adept with technology, and spent hours familiarizing myself with various platforms." Her willingness to learn and adapt, even when faced with unfamiliar terrain, showcases her commitment to her profession and her students.

Educator 3's challenges resonate with findings from a study by [9], [36], which highlighted the struggles faced by educators adjusting to the sudden boom in e-learning. The necessity of quickly adapting to new platforms and tools posed a significant challenge, especially for those not inherently tech-savvy. Educator 3's strategies align with the resilience models discussed by [37] which emphasizes the importance of continuous learning and adaptability in the teaching profession, especially in the face of rapid technological advancements. Furthermore, seeking peer support, as done by Educator 3, is echoed in the findings of [38] advocate for collaborative learning amongst educators as a means to navigate the digital era's demands.

Educator 4 Challenges and Resilience

Educator 4's narrative brings to light the difficulties stemming from balancing multiple roles. "Being a teacher, a parent, and a student at the same time brought about significant stress. I often felt torn between my responsibilities," she revealed. In a profession already laden with responsibilities, Educator 4's pursuit of further studies while managing her teaching duties and familial responsibilities exemplified the multi-faceted challenges educators face. Nevertheless, her resilience shone through her adaptive strategies. She mentioned, "I started organizing my day rigorously, allocating specific times for my roles. Moreover, I communicated my situation to my superiors and peers, seeking flexibility in my teaching hours and leaning on peer support to share resources and teaching strategies." By actively seeking solutions and harnessing support systems, Educator 4 demonstrated an impressive capacity to adapt and thrive amidst challenges.

The challenges Educator 4 faced mirror findings from a study by [29], which identified the intense pressures educators face when juggling multiple roles. The dilemma of prioritizing one responsibility over another can lead to feelings of inadequacy and stress. However, Educator 4's resilience strategies align with resilience

frameworks discussed by [5] which underscores the significance of time management, peer collaboration, and open communication in fostering resilience among educators. Additionally, [39] highlight the importance of seeking flexibility in working conditions to manage the demands of the teaching profession effectively.

Educator 5: Challenges and Resilience

Educator 5's narrative paints a vivid picture of the difficulties faced when navigating technological integration in teaching. "The rapid shift to online learning was a huge shock. I struggled with various digital platforms and often felt overwhelmed," he recounted. This highlights the immediate challenges educators had to confront with the sudden transition to online teaching, a change that required not just pedagogical adjustments but also technological proficiency. Despite these challenges, Educator 5 exhibited resilience through proactive learning and collaboration. He shared, "I took online courses, attended webinars, and frequently collaborated with tech-savvy colleagues to enhance my digital teaching skills. I was determined not to let technology become a barrier between me and my students." This determination, combined with the pursuit of continuous learning, showcases his commitment to adapt and provide quality education regardless of the medium.

Educator 5's challenges align with the findings of [2] which emphasized the initial hurdles educators encountered in transitioning to online teaching, especially in mastering various digital platforms. However, his resilience strategies resonate with the research by [40] which emphasizes the importance of continuous professional development and peer collaboration in building educators' digital competency. Moreover, [41] have underscored the positive impact of a growth mindset among educators, suggesting that those who view challenges as opportunities for growth are more likely to succeed in adapting to new teaching landscapes.

Educator 6: Challenges and Resilience

Educator 6's journey in the educational realm has been characterized by challenges related to interpersonal dynamics. They noted, "Building a rapport with students online was not the same as in-person. The virtual environment sometimes felt cold and distant." This sentiment underlines the complexities of fostering genuine human connections in a digital setting, which often lacks the subtle cues and nuances of face-to-face interactions. However, the resilience demonstrated by Educator 6 is palpable. They said, "I started integrating interactive tools and platforms, like breakout rooms and polls, to foster student engagement. I also set aside time for one-on-one sessions and virtual 'office hours' to understand and address individual student needs better." These actions not only highlight a willingness to adapt and utilize available resources but also a deep commitment to prioritize student well-being and learning.

The challenges faced by Educator 6 reflect the findings of [42] which discussed the hurdles in maintaining student engagement and fostering personal connections in online settings. On the other hand, Educator 6's resilience strategies are consistent with the suggestions made by [43] highlighted the effectiveness of interactive tools in bridging the virtual gap and creating a more dynamic online learning environment. Additionally, the emphasis on individual student sessions correlates with [44] study, which found that personalized feedback and interactions significantly enhance the online learning experience, fostering a stronger educator-student bond.

Educator 7: Challenges and Resilience

Educator 7 faced the multifaceted challenge of adapting to new teaching methodologies while grappling with personal emotional strains. They remarked, "Switching to online teaching was a paradigm shift. But, the harder part was battling the feeling of isolation from colleagues and students." This encapsulates the dual challenge of navigating new digital platforms and confronting the emotional toll of remote work. In the face of these challenges, Educator 7's resilience emerged as they sought solutions, both technical and personal. They shared, "I enrolled in online courses to enhance my digital teaching skills. Additionally, I initiated virtual coffee breaks with colleagues and group discussions with students to recreate the camaraderie of physical classrooms." These measures not only indicate a proactive approach to professional development but also a keen understanding of the importance of maintaining emotional well-being for effective teaching.

Educator 7's challenges mirror the findings of [2], which underscored the difficulties educators face when transitioning to digital platforms, especially when coupled with feelings of isolation. The resilience strategies employed by Educator 7 align with the research by [40] study recommended continuous learning as a means to adapt to the evolving digital education landscape. Furthermore, the importance of fostering connections, as highlighted by Educator 7, resonates with the findings of [45] emphasizing the psychological benefits of maintaining social interactions in remote work settings.

Educator 8: Challenges and Resilience

Educator 8 confronted the challenge of digital inequity among students. They stated, "I found that not all my

students had access to the necessary devices or stable internet for online learning. It wasn't just about teaching online; it was about ensuring all students had an equal opportunity to learn." This highlights the broader societal issue of digital divides, which became glaringly apparent during the pandemic's shift to remote learning. To address this, Educator 8 exhibited remarkable resilience and resourcefulness. They explained, "I collaborated with local communities and NGOs to secure tablets for those in need. I also recorded lessons so that students could download and view them when they had access, even if they missed the live session." Such measures underscore a commitment to equity in education, going beyond standard teaching duties to ensure no student was left behind.

Educator 8's challenges resonate with the findings of [46] which highlighted the persistent digital divides in education and their potential to exacerbate educational inequalities. The resilience strategies of Educator 8 align with the research by [47] which advocated for community partnerships and flexible teaching approaches as pivotal in addressing access disparities in online education. Furthermore, the emphasis on asynchronous learning, as described by Educator 8, is supported by findings from [48], which underscored its benefits in enhancing inclusivity and flexibility in digital education.

Educator 9: Challenges and Resilience

Educator 9 faced a linguistic barrier, as they encountered difficulties in promoting the consistent use of formal Indonesian language in school settings. They stated, "I advocated for students to always use formal Indonesian, but some teachers mixed it with the regional dialect. This disrupted the Indonesian language learning process." This challenge illuminates the broader issue of linguistic diversity in educational settings and the tension between formal and vernacular language use. In response to this, Educator 9 demonstrated resilience through patience, communication, and positive reinforcement. They remarked, "I requested my colleagues to use formal Indonesian consistently. If someone inadvertently used the regional dialect, I'd smile, signaling them to correct themselves. This way, they wouldn't feel offended, and it promoted a positive learning environment."

The linguistic challenges highlighted by Educator 9 echo with [49], which emphasized the complexities of linguistic diversity in Indonesian educational settings and its implications on teaching. Educator 9's resilience strategies align with the principles outlined by [50] stated the importance of positive reinforcement and non-verbal cues in promoting language learning and fostering an inclusive educational environment. The emphasis on fostering a positive and supportive teaching environment, as described by Educator 9, is also supported by the findings from [51] which highlighted the benefits of such an approach in enhancing student engagement and linguistic proficiency.

Educator 10: Challenges and Resilience

Educator 10 was faced with the challenging task of balancing multiple responsibilities, from undergoing a Professional Teacher Education Program (PPG) to preparing fifth-grade students for a series of evaluations and contests. They said, "While undergoing PPG, I also had to manage my fifth-grade students who were preparing for several contests and an evaluation. This often resulted in conflicts in my schedule, and I had to communicate effectively with various stakeholders to ensure smooth operations." The resilience of Educator 10 was evident in their proactive approach to communication and seeking support. They stated, "I explained my situation to the school management, fellow teachers, and parents, ensuring they understood my commitments. I also had to choose the right language and setting for communication, ensuring clarity and avoiding misunderstandings."

The multitasking challenges faced by Educator 10 resonate with the findings of [29] which highlighted the increasing demands on educators due to diversified roles and the need for continuous professional development in the digital age. The resilience strategies employed by Educator 10, primarily through open communication and stakeholder engagement, align with the conclusions drawn by [52] that emphasized the crucial role of effective communication in managing overlapping responsibilities and ensuring the smooth progression of educational objectives.

Summary of Educators' Challenges and Resilience in Indonesia

Across the ten educators, a common thread of challenges emerged, primarily revolving around adapting to digital transformations, managing diverse student needs, balancing administrative duties with teaching, handling language and cultural barriers, and navigating complex interpersonal dynamics within educational institutions.

1. **Adaptation to Digital Transformation:** Many educators faced the challenge of integrating technology into their teaching practices. Their resilience was shown through their willingness to learn and adapt, even when it was outside their comfort zone.
2. **Managing Diverse Student Needs:** Educators were often tasked with addressing the varied educational and emotional needs of their students. They demonstrated resilience by employing

- differentiated instruction strategies and showing empathy.
3. **Balancing Administrative and Teaching Duties:** The dual roles of administration and teaching posed significant challenges. Educators displayed resilience by improving their time management skills and seeking collaborative solutions.
 4. **Language and Cultural Barriers:** Some educators struggled with language differences and cultural barriers in their classrooms. Their resilience was evident in their efforts to promote inclusive language practices and cultural sensitivity.
 5. **Navigating Interpersonal Dynamics:** Interactions with colleagues, parents, and community members sometimes led to conflicts. Educators showed resilience by enhancing their communication skills and fostering a culture of mutual respect and understanding.

The challenges faced by these educators are consistent with the broader trends identified in educational research, which highlight the multifaceted role of teachers in the digital era [29]. The resilience strategies they employed align with the growing recognition of the importance of professional development, emotional intelligence, and effective communication in overcoming these challenges [30]. These provide a snapshot of the complex landscape that educators navigate and the resilience they exhibit in their professional journeys. Each educator's unique approach to overcoming challenges enriches our understanding of resilience in the educational context.

CONCLUSION

The research aimed to unearth the coping mechanisms and resilience strategies that educators employ in response to the digital era's demands. Our investigation into the experiences of ten educators uncovered a rich tapestry of adaptive strategies, extending beyond technological proficiency to include interpersonal and administrative adaptability. This aligns seamlessly with our research objective, offering a multi-dimensional portrait of resilience in educational settings. In terms of novelty, this research breaks new ground by delving into the varied facets of educators' resilience. It moves beyond a singular focus on digital adaptation, shedding light on the complex interplay between personal, professional, and technological realms. This nuanced perspective paves the way for targeted interventions and support systems, urging educational policies to evolve in response to the diverse needs of educators.

The implications of this research are far-reaching, suggesting the need for robust support structures within educational institutions. These structures should encompass professional development programs specifically designed to fortify resilience and provide the necessary resources for educators to thrive amidst the challenges posed by the digital era. Looking ahead, future research could explore the long-term effects of these resilience strategies on educators and their students. Investigating the interconnections between coping mechanisms, teaching efficacy, and student outcomes could yield valuable insights. Furthermore, examining the role of institutional support in fostering educator resilience could guide educational systems towards more supportive and adaptable frameworks, ensuring their relevance and effectiveness in a rapidly evolving digital landscape.

REFERENCES

- [1] R. Makhachashvili and I. Semenist, "Interdisciplinary Trends of Digital Education in the COVID-19 Paradigm: Global Event Horizon," *J. Syst. Cybern. Informatics*, vol. 19, no. 9, pp. 57–64, Dec. 2021, doi: 10.54808/JSCI.19.09.57.
- [2] S. Musa, S. Nurhayati, R. Jabar, D. Sulaimawan, and M. Fauziddin, "Upaya dan Tantangan Kepala Sekolah PAUD dalam Mengembangkan Lembaga dan Memotivasi Guru untuk Mengikuti Program Sekolah Penggerak," *Obsesi*, vol. 6, no. 5, pp. 4239–4254, 2022, doi: 10.31004/obsesi.v6i5.2624.
- [3] W. Winarti, S. Nurhayati, N. Rukanda, R. Jabar, and E. E. Rohaeti, "Analisis Kompetensi Digital Guru PAUD dalam Mengelola Pembelajaran Daring Anak Usia Dini," *Obsesi*, vol. 6, no. 6, pp. 5621–5629, 2022, doi: 10.31004/obsesi.v6i6.3111.
- [4] W. Li, "Resilience Among Language Learners: The Roles of Support, Self-Efficacy, and Buoyancy," *Front. Psychol.*, vol. 13, Mar. 2022, doi: 10.3389/fpsyg.2022.854522.
- [5] D. A. Wuest and P. R. Subramaniam, "Building Teacher Resilience During a Pandemic and Beyond," *Strategies*, vol. 34, no. 5, pp. 8–12, Sep. 2021, doi: 10.1080/08924562.2021.1948476.
- [6] S. Nurhayati, A. W. Hidayat, I. S. Awan, and D. Noviatul, "The Effectiveness of Virtual Classroom Learning in Islamic Early Childhood Education," in *2nd Paris Van Java International Seminar on Health, Economics, Social Science and Humanities (PVJ-ISHESSH 2021)*, 2023, pp. 428–437. doi: 10.18502/kss.v8i4.12927.
- [7] A. Iskandar *et al.*, "Transformasi Pembelajaran Melalui Augmented Reality dan Virtual Reality," in *Peran Teknologi Dalam Pendidikan*, 2023.

- [8] Y. Suharyat, T. E. Susilawati, M. I. Sikki, and S. Nurhayati, "Online Learning Quality Evaluation in Higher Education During COVID-19 Pandemic," *Society*, vol. 10, no. 1, pp. 207–219, 2022.
- [9] M. Fauziddin, D. Mayasari, and L. M. Rizki, "Effective Learning for Early Childhood during Global Pandemic," *AL-ISHLAH J. Pendidik.*, vol. 13, no. 1, pp. 515–522, 2021, doi: 10.35445/alishlah.v13i1.458.
- [10] S. M. Marségi, S. Nurhayati, A. Ansori, and H. Hendriana, "Digital-Based Portfolio Assessment Competence of Early Childhood Educators," *Obsesi*, vol. 7, no. 1, pp. 251–259, 2023, doi: 10.31004/obsesi.v6i6.3360.
- [11] M. Ranieri and I. Bruni, "Digital and media literacy in teacher education: Preparing undergraduate teachers through an academic program on digital storytelling," in *Handbook of Research on Media Literacy in Higher Education Environments*, IGI Global, 2018, pp. 90–111. doi: 10.4018/978-1-5225-4059-5.ch006.
- [12] Y. Novitasari and M. Fauziddin, "Analisis Literasi Digital Tenaga Pendidik pada Pendidikan Anak Usia Dini," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 6, no. 4, pp. 3570–3577, 2022, doi: 10.31004/obsesi.v6i4.2333.
- [13] I. Moll Riquelme, S. Bagur Pons, and M. R. Rosselló Ramon, "Resilience: Conceptualization and Keys to Its Promotion in Educational Centers," *Children*, vol. 9, no. 8, p. 1183, Aug. 2022, doi: 10.3390/children9081183.
- [14] J. P. Rojas-Suárez, M. Vergel Ortega, and H. J. Gallardo Pérez, "Resilience in successful math and physics students," *J. Phys. Conf. Ser.*, vol. 1587, no. 1, p. 012015, Jul. 2020, doi: 10.1088/1742-6596/1587/1/012015.
- [15] I. King, C. Saxena, C. Pak, C. Lam, and H. Cai, "Rethinking Engineering Education: Policy, Pedagogy, and Assessment During Crises," *IEEE Signal Process. Mag.*, vol. 38, no. 3, pp. 174–184, May 2021, doi: 10.1109/MSP.2021.3059243.
- [16] K. D. Amponsah, G. S. Adasi, S. M. Mohammed, E. Ampadu, and A. K. Okrah, "Stressors and coping strategies: The case of teacher education students at University of Ghana," *Cogent Educ.*, vol. 7, no. 1, Jan. 2020, doi: 10.1080/2331186X.2020.1727666.
- [17] W. Admiraal, "Student-teachers' emotionally challenging classroom events: a typology of their responses," *Educ. Stud.*, vol. 47, no. 6, pp. 765–769, Nov. 2021, doi: 10.1080/03055698.2020.1729097.
- [18] A.-M. Aulén, E. Pakarinen, T. Feldt, and M. Lerkkanen, "Teacher coping profiles in relation to teacher well-being: A mixed method approach," *Teach. Teach. Educ.*, vol. 102, p. 103323, Jun. 2021, doi: 10.1016/j.tate.2021.103323.
- [19] A. Nuraeni and S. Nurhayati, "Efektivitas Workshop Pembuatan Buku Digital Modul Ajar dalam Meningkatkan Kompetensi Pedagogik Pendidik PAUD," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 7, no. 5, pp. 5745–5756, 2023, doi: 10.31004/obsesi.v7i5.4787.
- [20] E. H. Ghofur and S. Nurhayati, "Multimedia-Based Learning Media Development to Improve Early Childhood Expressive Language Ability," *Obsesi*, vol. 7, no. 2, pp. 2373–2382, 2023, doi: 10.31004/obsesi.v7i2.4416.
- [21] N. Nurmalia, S. Nurhayati, and A. H. Noor, "Developing Students' Leadership Spirit during COVID-19 Pandemic through Virtual-Based Scouting Activities," *Society*, vol. 10, no. 2, pp. 447–456, 2022, doi: 10.33019/society.v10i2.412.
- [22] J. B. Mushimiyimana, G. Bazimaziki, and D. Tuyishime, "ICT Integration in Educational curriculum in Higher Education: Challenges and opportunities in the University of Rwanda-College of Education," *J. Humanit. Educ. Dev.*, vol. 4, no. 2, pp. 118–137, 2022, doi: 10.22161/jhed.4.2.16.
- [23] J. Wang, D. E. H. Tigelaar, and W. Admiraal, "From policy to practice: integrating ICT in Chinese rural schools," *Technol. Pedagog. Educ.*, vol. 31, no. 4, pp. 509–524, Aug. 2022, doi: 10.1080/1475939X.2022.2056504.
- [24] C. B. Góes and G. Cassiano, "O uso das Plataformas Digitais pelas IES no contexto de afastamento social pela Covid-19," *Folha de Rosto*, vol. 6, no. 2, pp. 107–118, Jul. 2020, doi: 10.46902/2020n2p107-118.
- [25] F. Ferri, P. Grifoni, and T. Guzzo, "Online Learning and Emergency Remote Teaching: Opportunities and Challenges in Emergency Situations," *Societies*, vol. 10, no. 4, p. 86, Nov. 2020, doi: 10.3390/soc10040086.
- [26] L. Kostikova and O. Fedotova, "Pedagogical Communication Under the Conditions of Digital Transformation at the Educational Space of The University," *Sci. Res. Dev. Mod. Commun. Stud.*, vol. 11, no. 2, pp. 53–59, May 2022, doi: 10.12737/2587-9103-2022-11-2-53-59.
- [27] S. Buzu and M. Beschieru, "Online Classroom Management and Motivation," *Univers Pedagog.*, vol. 2, no. 2(70), pp. 23–27, Jul. 2021, doi: 10.52387/1811-5470.2021.2.04.
- [28] L. Enbaeva and N. Plastinina, "Distance Learning Challenges in Translation Teaching: Mediation Competence Development," in *E3S Web of Conferences*, V. Kankhva, Ed., May 2021, p. 07078. doi: 10.1051/e3sconf/202125807078.

- [29] S. Babushko, M. Solovei, and L. Solovei, "Digitalization Of Education: Challenges For Teachers," in *Grail of Science*, Jun. 2022, pp. 460–464. doi: 10.36074/grail-of-science.27.05.2022.082.
- [30] A. Akinyemi and V. Nkonki, "Enhancing Continuing Professional Teachers' Development in High Schools through Support and Monitoring Offered to Communities of Practice by Stakeholders," *J. Educ. Soc. Res.*, vol. 10, p. 253, 2020, doi: 10.36941/jesr-2020-0124.
- [31] J. Triningsih and M. Muhyadi, "Effect of Principal Managerial Competence on Quality of SBM Implementation in UPT Elementary Schools District of Depok, Sleman," in *International Conference on Meaningful Education (ICMed)*, Knowledge E, Jun. 2019. doi: 10.18502/kss.v3i117.4631.
- [32] S. Nurhayati, "Parental Involvement in Early Childhood Education for Family Empowerment in The Digital Age," *J. Empower. J. Ilm. Progr. Stud. Pendidik. Luar Sekol.*, vol. 10, no. 1, pp. 54–62, 2021.
- [33] S. Nurhayati, N. A. Qudsi, N. Rukanda, and A. Fitri, "Parents-School Strategic Collaborations in Early Childhood School From-Home Learning During the Pandemic," *Al Ishlah*, vol. 15, no. 1, pp. 964–971, 2023, doi: 10.35445/alishlah.v15i1.2605.
- [34] E. Juhana and S. Nurhayati, "Parents' Strategies in Improving Childrens' Ability to Memorize Al Qur'an," *SPEKTRUM J. Pendidik. Luar Sekol.*, vol. 11, no. 2, 2023, doi: 10.24036/spektrumpls.v11i2.113997.
- [35] Y. Suharyat, S. Nurhayati, D. Januliawati, P. Haryono, I. Muthi, and M. Zubaidi, "Tantangan Pemberdayaan Orang Tua dalam Meningkatkan Mutu Layanan PAUD Era Digital," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 7, no. 1, pp. 406–415, 2023, doi: 10.31004/obsesi.v7i1.3827.
- [36] L. C. Guerrero, J. C. R. Rodriguez, and M. A. C. Pacheco, "Virtual Learning During the COVID-19 Pandemic: The Opening for the Implementation of a Blended Learning Modality in the Chemistry Class at High School Level," *Int. Educ. Res.*, 2023, doi: 10.30560/ier.v6n1p1.
- [37] L. L. D. Mallillin, "Teacher Theory And Adaptable Model: An Application To Teaching Profession," *Eur. J. Educ. Stud.*, vol. 8, no. 12, Nov. 2021, doi: 10.46827/ejes.v8i12.4044.
- [38] L. Portelance, J. Caron, and S. Martineau, "Collaboration through knowledge sharing between cooperating teachers and university supervisors," *Brock Educ. J.*, vol. 26, no. 1, Jul. 2017, doi: 10.26522/brocked.v26i1.466.
- [39] L. Lübke, M. Pinquart, and M. Schwinger, "The Role of Flexibility in the Realization of Inclusive Education," *Sustainability*, vol. 13, no. 8, p. 4452, Apr. 2021, doi: 10.3390/su13084452.
- [40] N. Dusadee and P. Piriyaawong, "Virtual Professional Training Community Model for Developing Digital Teacher Competencies," *Univers. J. Educ. Res.*, vol. 8, no. 9, pp. 4234–4241, Sep. 2020, doi: 10.13189/ujer.2020.080950.
- [41] C. Meierdirk and S. Fleischer, "Exploring the mindset and resilience of student teachers," *Teach. Dev.*, vol. 26, no. 2, pp. 263–278, Mar. 2022, doi: 10.1080/13664530.2022.2048687.
- [42] S. C. Parija and P. Bobhate, "Fostering Student Engagement in Virtual Learning Environment," *SBV J. Basic, Clin. Appl. Heal. Sci.*, vol. 4, no. 3, pp. 57–58, Sep. 2021, doi: 10.5005/jp-journals-10082-03123.
- [43] X. Liu, "Improve Interactivity in Online Learning: Take Nearpod as an Example," *J. Educ. Humanit. Soc. Sci.*, vol. 8, pp. 1954–1960, Feb. 2023, doi: 10.54097/ehss.v8i.4622.
- [44] S. Das, S. Roy, R. Bose, P. P. Acharjya, and H. Mondal, "Analysis of Student Sentiment Dynamics to Evaluate Teachers Performance in Online Course using Machine Learning," in *2022 International Conference on Applied Artificial Intelligence and Computing (ICAAIC)*, IEEE, May 2022, pp. 668–673. doi: 10.1109/ICAAIC53929.2022.9792958.
- [45] S. Blazhevski, I. Mileva, and M. Bojadjiev, "The Relationship between Remote Work and Job Satisfaction: the Mediating Roles of Social Interaction and Work-family Conflict," in *16th Annual International Conference on European Integration (AICEI)*, 2021.
- [46] A. Mathrani, T. Sarvesh, and R. Umer, "Digital divide framework: online learning in developing countries during the COVID-19 lockdown," *Glob. Soc. Educ.*, vol. 20, no. 5, pp. 625–640, Oct. 2022, doi: 10.1080/14767724.2021.1981253.
- [47] M. Laufer *et al.*, "Digital higher education: a divider or bridge builder? Leadership perspectives on edtech in a COVID-19 reality," *Int. J. Educ. Technol. High. Educ.*, vol. 18, no. 1, p. 51, Dec. 2021, doi: 10.1186/s41239-021-00287-6.
- [48] V. Lytvyn, O. Akimova, H. Kuznetsova, T. Zenchenko, O. Stepanenko, and I. Koreneva, "Use Of Synchronous And Asynchronous Teaching Methods In Pedagogical Education In COVID-19 Terms," *Int. J. Health Sci. (Qassim)*, vol. 5, no. 3, pp. 617–629, Dec. 2021, doi: 10.53730/ijhs.v5n3.2681.
- [49] T. Walker, I. Liyanage, S. Madya, and S. Hidayati, "Media of Instruction in Indonesia: Implications for Bi/Multilingual Education," in *Multilingual Education Yearbook 2019*, 2019, pp. 209–229. doi: 10.1007/978-3-030-14386-2_12.
- [50] P. A. Meizy, B. Suharjo, and A. Rofiq, "Students' Responses to Teacher's Reinforcement: A Discourse Analysis," *J. English Educ. Teach.*, vol. 6, no. 2, pp. 158–170, Jun. 2022, doi: 10.33369/jeet.6.2.158-170.

- [51] N. Pino-James, D. J. Shernoff, D. M. Bressler, S. C. Larson, and S. Sinha, "Instructional Interventions That Support Student Engagement: An International Perspective," in *Handbook of Student Engagement Interventions*, Elsevier, 2019, pp. 103–119. doi: 10.1016/B978-0-12-813413-9.00008-5.
- [52] Fauzan Ahmad Siregar and Lailatul Usriyah, "Peranan Komunikasi Organisasi dalam Manajemen Konflik," *Idarah (Jurnal Pendidik. dan Kependidikan)*, vol. 5, no. 2, pp. 163–174, Dec. 2021, doi: 10.47766/idarrah.v5i2.147.

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