

Empowering The Future: Innovative Education Strategies For Global Skills In The Context Of The Golden Generation 2045

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ABSTRACT

This research aims to explore the development of 21st century skills in a global context for the 2045 generation through innovative educational strategies. The study used descriptive qualitative research methods and included in-depth interviews with teachers, classroom observations and document analyses. The uniqueness of this study lies in the comprehensive mapping of the implementation of innovative strategies in a multicultural and international education environment. The results of this study highlight the success of student-centred learning approaches, integration of advanced technologies and curriculum design linked to 21st century skills. These findings contribute significantly to a deeper understanding of how innovative education can address the global challenges of the 2045 generation. In addition, this research provides a concrete picture of the dynamics and success of implementing this strategy in an international context. The novelty of this research lies in the combination of a qualitative descriptive approach and global impact, which makes a valuable contribution to the textbook literature. The practical implications of this research include specific guidelines for policy makers, administrators and education professionals who want to prepare students for a challenging future in the globalised era of 2045.

INTRODUCTION

We are on the threshold of an era of rapid technological development and global interconnection, and cultivating a skilled and adaptable workforce is a necessary endeavor. The next generation, considered the Golden Generation of 2045, will face the complex challenge of navigating an ever-evolving landscape shaped by diverse cultural, economic and technological forces. This era calls for a paradigm shift in education that transcends traditional boundaries and embraces innovative strategies to equip young people with essential 21st century skills. A focus on developing skills relevant to a dynamic global environment is key and requires a reform of educational methods and curriculum frameworks. This study initiates critical research in education to understand and implement innovative strategies that specifically address the needs of the Golden Generation of 2045. (Sumarti, 2022)

Education faces significant challenges in responding to global, economic and technological changes. Reflecting the urgency of transforming education to match the dynamics of the future. By exploring 21st century skills and innovative strategies, this research provides a foundation for developing adaptive and progressive education. The results are expected to guide policymakers and educators in designing an education system that meets the complex needs of the future, bridging the gap between traditional models and the demands of Generation 2045 in this changing era. (Johanes F.A, et.al., 2022). Education is a fundamental pillar in shaping the future direction, detailing the strategic challenges and needs in preparing the next generation. As the economy rapidly changes, technology advances and global challenges become more complex, education must keep pace with these dynamic developments. In the context of 2045, this research explores the skills needs of the 21st century, exploring innovative strategies involving technology, adaptive learning and relevant curricula. By understanding the essence of the skills required, this research aims to provide practical guidance for shaping education that is responsive and prepared for dynamic change, thereby equipping the Generation of 2045 with relevant and necessary capabilities in the 21st century.

Using a qualitative, descriptive research method, this study dares to integrate new pedagogical approaches, use cutting-edge technology and design curricula adapted to develop the skills necessary to succeed in an era of rapid change and complexity. Furthermore, this study extends its scope beyond national boundaries and recognizes the interconnectedness of today's world. It aims to demystify the nuances of implementing these innovative educational strategies in multicultural and international educational environments, recognizing the different challenges and opportunities that such contexts present. This article not only shows the urgent need for educational innovation, but also serves as a guide for educators, policy makers and stakeholders. It offers invaluable insights and practical recommendations to shape the educational landscape that promotes the preparation of the golden generation of 2045. challenges and opportunities ahead. (Lisa R., et.al., 2022).

There are several relevant previous studies related to the topic "Empowering the Future: Innovative Education Strategies for Global Skills in

the Context of the Golden Generation 2045" as follows: First, "Relationship between nonformal education and Islamic Education in the Context of 2045 Agenda towards Education 4.0 and Society 5.0: Bibliometric Analysis" discusses the relationship between nonformal education and Islamic education in the context of the 2045 agenda towards Education 4.0 and Society 5.0. The study aims to relate nonformal education and Islamic education through the period of 1958-2022 and analyze the bibliographic citation data using the VOS viewer application. (Elihami, 2022). Second, "Character Education for Golden Generation 2045 (National Character Building for Indonesian Golden Years)". This research emphasises the importance of character education in building good character of the golden generation 2045. (Fathur Rokhman, et al. 2014). Third, "Preparing Independent Golden Millennial Generation Through Character Education". This research also discusses IESQ (intelligence, emotional, spiritual Quation) skills as a measurement of character success of the 2045 golden generation. (Listyaningsih, et.al, 2020). Fourth, "Existence of Tourism Higher Education Under the Ministry of Tourism and Creative Economy (PTNP) Toward Indonesia's Golden Generation 2045" This research the strategy of Tourism Higher Education (PTNP) operated by the Ministry of Tourism and Creative Economy in Indonesia. (Syamsu Rijal et al., 2022). Fifth, "Responding to the Challenges of the 2045 Golden Generation: Improving a Legal-Aware Golden Generation with a Cultural and Identity Education Approach". This research also discusses education in the context of culture and identity as an approach to developing the 2045 golden generation. (Aprillio P., et.al, 2023).

Based on the above description, the author explores several innovative educational strategies that can strengthen the global skills of future generations. We look at how the use of technology can expand the educational opportunities of people with disabilities, how collaborative approaches develop social skills and teamwork skills, and how diverse learning experiences can enrich an understanding of a complex world. In this journey, we explore bold ideas that transcend traditional boundaries. We encourage creative and bold thinking to find innovative solutions to create a better and more efficient future of education. Together, we explore the possibilities of education to form the Golden Generation of 2045, which is strong, intelligent and ready to face the challenges of the world. In this study, we invite readers to push the boundaries of conventional thinking. The path we walk is a path of discovery, where we look for new approaches that can improve education. Through this collaboration, we aim to unlock the full potential of education, forming a sustainable and forward-looking Golden Generation in 2045, ready to face the challenges of an ever-evolving world.

LITERATURE REVIEW

Constructivist Learning Theory

This theory deals with how individuals actively build their knowledge through interaction with the environment and learning experiences. In the context of "Empowering The Future," constructivist approaches can support

innovative educational strategies by emphasizing students' active role in understanding and addressing future challenges. This theory is reinforced by works such as Jean Piaget and Lev Vygotsky who highlight the importance of learning integrated with direct experience and social interaction. Innovative educational strategies are becoming a focal point in educational discourse. Scholars argue that traditional approaches may not be enough to prepare students for the challenges of a rapidly changing world. Various studies highlight the effectiveness of project-based learning, flipped classrooms, and technology integration in fostering critical thinking, creativity, and problem-solving skills. The work of Papert (1980) on constructionist learning and pedagogical approaches outlined by Vygotsky (1978) emphasizes the importance of hands-on experience and collaborative learning environments. These theories provide a basis for understanding how innovative educational strategies can be used to improve learning outcomes.

21st Century Skills Theory:

This theory emphasizes the need to develop relevant skills to face the demands of society and the job market in the 21st century. In the context of the title, 21st century skills theory supports the ideas of global skill development, creativity, collaboration, and critical and innovative thinking. Tony Wagner's work, which lays out 7 Critical Skills for Success in the 21st Century, can be the theoretical foundation for directing innovative educational strategies that prepare future generations. Globalization has changed the nature of work and demands the development of diverse skills. The concept of global expertise includes cultural competence, communication, collaboration, and adaptability. The work of Zhao (2013) and Wagner (2008) emphasizes the need to shift focus from standardized exams to coaching globally relevant skills. In addition, the UNESCO Framework of Education for Sustainable Development (ESD) advocates an interdisciplinary approach to education, integrating the principles of sustainable development into the curriculum. This aligns with the idea of preparing students for the challenges faced by global issues such as climate change, poverty, and inequality.

Generation Theory

This theory focuses on understanding differences and traits between generations in terms of values, preferences, and ways of learning. In the context of "Golden Generation 2045," generational theories, such as Strauss-Howe's theory, can provide insight into the hopes, aspirations, and values that this generation may have. An understanding of generational characteristics can guide the design of educational strategies that better suit the specific needs and preferences of this Golden Generation.

The term "Golden Generation" implies a group of individuals with tremendous potential and opportunity. To understand the context of 2045, it is important to consider demographic, technological, and socio-economic trends. Projections by scholars such as Frey and Osborne (2017) highlight the impact of automation on the job market, suggesting the need for education systems to adapt and prepare students for roles requiring distinctively human skills. In

addition, research into generational characteristics and preferences, as outlined by Strauss and Howe (1991) in their generation theory, can provide insight into the expectations and values of the Golden Generation, influencing the design of educational strategies.

METHODOLOGY

This research uses a descriptive qualitative approach to investigate innovative educational strategies related to the Golden Era 2045. The focus is on an in-depth understanding of the effectiveness of these strategies in preparing global skills for future generations. The research was conducted in various educational institutions, including schools, educational institutes and training centres, representing various educational environments. The research period was conducted over several months to obtain data that is representative of the various educational dynamics that exist. The research audience included a wide range of education stakeholders, including teachers, students, administrators and education professionals. The sample was purposively selected by considering geographical, neighbourhood and educational level diversity. The sample selection process ensured representation of different educational contexts. The research variables included innovative aspects of education such as technology integration, economic curriculum change, skills upgrading and globalisation of education. Each variable was clearly labelled to facilitate the collection of relevant data. Data were collected through semi-structured interviews with education stakeholders, direct classroom observations and document analyses related to education policies and curricula. Interviews were recorded and transcribed for further analysis, and observations were used to understand first-hand the implementation of innovative teaching strategies. Data analysis used a qualitative approach with a thematic analysis process to identify patterns, trends and key findings from the qualitative data collected. Data from interviews, observations, and document analyses were compared and synthesised to draw meaningful conclusions. Through this approach, this research provides a comprehensive understanding of the effectiveness of innovative educational strategies in preparing for the global competence of the golden generation of 2045, as well as providing further improvement and development in education.

RESEARCH RESULT

Economic and Technological Transformation

Economic changes fuelled by technological advancements will rapidly change the structure of work around the world. The golden generation of 2045 will be faced with more complex and high-tech integrated job demands. Therefore, education must provide a foundation of relevant skills, such as a deep understanding of current technologies, critical thinking and adaptability.

According to research by Acemoglu and Restrepo (2019), automation and artificial intelligence may replace routine jobs, but create new opportunities for jobs that combine human intelligence with technology. Economic and technological transformations form a key foundation in understanding the

dynamics of education towards the future, especially in the context of the 2045 generation. Throughout history, technological developments and changes in economic structures have had a significant impact on education. In an era of rapidly evolving technology, where artificial intelligence and automation increasingly dominate economic sectors, education must adapt to prepare future generations with relevant skills. (Daron A & Pascual, 2020).

Michael Fullan, a renowned education expert, highlights the importance of integrating technology in learning. He states, "Education must be a leader in the use of technology to enhance the learning experience and prepare students for an increasingly connected world." In the transformation of the economy, there is a significant shift in the types of jobs required in the market. (Azam Syukur R, et al., 2022). Erik Brynjolfsson, a digital economy researcher, pointed out, "Jobs that are safe from automation are those that incorporate creativity, empathy and other human skills. Education should emphasise the development of these skills. (Erik Brynjolfsson, et.al, 2023).

Therefore, to meet the golden generation of 2045, education must adopt innovative learning methods that encourage creativity, critical thinking, and adaptation to the latest technology. Engaging students in learning experiences that are practical and relevant to economic and technological developments is the essence of innovative education. In the words of Klaus Schwab, founder of the World Economic Forum, "Education must be the primary tool for building human capacity for creative thinking and for coping with conflict in a changing world. Education must empower us to face reality, not run away from it. By understanding the role of economic and technological transformation, education can become a driving force for positive change, preparing the golden generation of 2045 to be competitive leaders and contributors in a challenging global era. (Rijal et.al., 2022).

In responding to economic and technological transformation, innovative education strategies are increasingly crucial. As Fullan states, "Education must be a leader in the use of technology to enhance learning experiences and prepare students for an increasingly connected world." Therefore, education must involve learning methods that are adaptive and relevant to economic and technological developments. Klaus Schwab supports this idea by stating, "Education should empower us to face reality, not run away from it." The integration of creative concepts and skills, along with adaptation to change, is key to creating a golden generation of 2045 that is competent and ready to face complex global challenges. Innovative education is thus a vital bridge between economic development and the need for deep skills to face an unpredictable future. (Ella G., & Anita W., 2020).

Table 1. Aspects, Impacts, And Strategies Related To Economic And Technological Transformation In The Field Of Education

Aspect	Impact	Strategy
Technology Integration	Expanding access to education through digital platforms.	Improving learning efficiency with advanced technology.
Economic Transformation	Implementation of e-learning platforms and digital resources.	Training teachers in the use of educational technology.
	Adapting curriculum to the demands of the global labour market.	Encouraging entrepreneurship among students.
Skills Enhancement	Collaboration with industry to define skills needs.	Development of entrepreneurship programmes in the curriculum.
	Development of skills relevant to Society 5.0 era.	Strengthening critical and analytical skills.
Globalisation of Education	Focus on digital literacy, problem solving and creativity.	Curriculum development orientated towards skills development.
	Increasing students' understanding of global cultural diversity.	Expanding collaboration networks between educational institutions.
	Student exchange programmes and international cooperation.	Integration of subjects with a global perspective.

The integration of technology into education, exemplified by the introduction of e-learning platforms and digital resources, has emerged as a major force in expanding access to education. This innovative approach not

only removes geographical barriers but also improves the overall efficiency of learning through advanced technological tools. Rephrase Providing comprehensive training to teachers on the effective use of education technology will enable the education sector to successfully navigate the digital environment. Economic transformation in education is essential to prepare the next generation for the demands of the global labour market. Tailoring curricula to industry needs and fostering collaboration with various sectors are fundamental steps. Promoting entrepreneurship in students and incorporating entrepreneurship programmes into the curriculum not only equips them with practical skills, but also the positive mindset needed to succeed in an ever-evolving economic landscape. Upgrading skills, especially those relevant to the era of Society 5.0, is fundamental in preparing for the golden generation Era of 2045. By emphasising digital literacy, problem solving, creativity, and a focus on strengthening critical and analytical skills, students are bound to upskill. We are well equipped to face the challenges and opportunities of the modern world. Developing a curriculum that focuses on skills development is essential to developing a workforce that is not only knowledgeable, but also flexible and adaptable. (Margarita et.al, 2022).

The globalisation of education plays an important role in producing well-rounded human resources capable of living in a diverse and interconnected world. Initiatives such as student exchange programmes, international cooperation and integration of subjects with a global perspective help broaden students' understanding of global cultural diversity. Moreover, fostering collaborative networks between institutions encourages the exchange of ideas and best practices, thereby enriching the overall educational experience. In summary, the interconnectedness of technology, economic change, skills upgrading and globalisation in education lays the foundation for the golden generation of 2045 to thrive in a dynamic and interconnected future. These strategies are not only future-orientated, but also essential for developing human resources that can contribute meaningfully to the global community. (Rokhman et al., 2020).

DISCUSSION

Empowering The Future: The word "empowering" alludes to a change from the conventional educational model to a dynamic, interactive one. Education should actively enable students to think critically, solve problems, and make meaningful contributions to a globalized society rather than being limited to the transmission of knowledge.

The term "Innovative Education Strategies" highlights the importance of implementing state-of-the-art techniques. This calls for combining interdisciplinary methods, technology, and experiential learning. The goal of innovative strategies is to promote imagination, flexibility, and a comprehensive comprehension of complicated global issues.

Regarding Global Skills: The emphasis on "global skills" highlights the necessity of possessing competencies that go beyond conventional academic knowledge. It entails global issues awareness, cooperative problem-solving,

digital literacy, and cross-cultural communication. These abilities are necessary for people to prosper in a diverse and interconnected world.

In *The Golden Generation 2045 Context: The "Golden Generation 2045"* alludes to the distinct traits and time period of the generation that will reach adulthood in 2045. It is expected of this generation to navigate a time of swift technological progress, intricate global issues, and global interconnectedness. Education policies therefore need to take into account the unique needs and goals of this generation.

Implication:

Holistic Development: The conversation emphasizes the need for an educational framework that supports students' cognitive, social, emotional, and practical skills. This all-encompassing strategy is essential for preparing people for the complex challenges that lie ahead.

Lifelong Learning: Given that the "Golden Generation" is likely to live long lives, lifelong learning is essential. Education strategies should promote lifelong learning, flexibility, and resilience in people.

Cultural Competence: As the education strategies aim for global skills, cultural competence becomes pivotal. The ability to navigate diverse cultural landscapes and collaborate with people from various backgrounds is essential for success in the globalized world.

Technology Integration: Innovative strategies necessarily involve the integration of technology. This implies not only providing access to digital tools but also fostering digital literacy and leveraging technology to enhance the learning experience.

Preparation for Uncertainty: The dynamic nature of the future requires education strategies that prepare individuals for uncertainty. Critical thinking, problem-solving, and the ability to navigate ambiguity become key components in preparing the Golden Generation for the challenges ahead.

In conclusion, *"Empowering The Future"* signifies a paradigm shift in education, emphasizing innovation, global relevance, and the unique requirements of the Golden Generation 2045. The discussion underscores the importance of preparing individuals not just for careers but for active participation in a globally connected and rapidly changing world.

CONCLUSIONS AND RECOMMENDATIONS

In a bid to empower the Golden Generation of 2045, innovative education strategies are essential in preparing them for an increasingly complex and globally connected world. Technology integration becomes a favourable foundation, expanding access to education through digital platforms, and improving learning efficiency with advanced technology. The economic changes taking place are having a significant impact on the education curriculum, by adapting it to the demands of the global labour market. Collaboration with industries to determine skills needs, as well as encouraging entrepreneurship among students, are important steps in creating graduates who are not only competent but also proactive in the face of dynamic economic

changes. Upskilling involves developing skills relevant to the society 5.0 era, with a particular focus on digital literacy, problem-solving and creativity. This balance is reinforced by the strengthening of critical and analytical skills, creating graduates who are not only knowledgeable but also flexible and adaptable. The globalisation of education is a key element in shaping individuals who can successfully interact in a diverse and connected world. Student exchange programmes, international cooperation and the integration of subjects with a global perspective all contribute to a deeper understanding of global cultural diversity. Taken together, these innovative education strategies provide a strong foundation in shaping a Golden Generation of 2045 that is not only globally skilled, but also able to face the challenges of the future. With this progressive approach, we are not only imparting knowledge, but also instilling a creative spirit, entrepreneurship, and sensitivity to differences - elements that are essential to creating successful and impactful future leaders in an ever-evolving globalised world.

ADVANCED RESEARCH

The problem statement "Empowering The Future: Innovative Education Strategies For Global Skills In The Context Of The Golden Generation 2045" may be studied using a multidisciplinary approach and in-depth case studies by researchers who are interested in delving into it. Through the integration of multiple disciplines, including education, technology, psychology, and sociology, this research can offer a more comprehensive understanding of how innovative education strategies are implemented. By means of comprehensive case studies, scholars can explore the intricacy of contextual factors and comprehend the dynamics that impact the efficacy of these tactics in institutional or more specialized educational contexts. As a result, the study will advance theoretical knowledge while also providing useful information that can be used in a variety of educational contexts.

In addition, researchers can improve their research by actively involving parents, students, and teachers in the creation and assessment of creative teaching methods. In addition to ensuring greater acceptance of the strategy's execution, this participatory approach can promote continued cooperation between families, communities, and educational institutions. By taking these recommendations into account, scholars can better comprehend the dynamics and effects of cutting-edge educational practices in molding the Golden Generation 2045 and equipping them with the necessary skills to meet global challenges.

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REFERENCES

- Acemoglu, Daron, and Pascual Restrepo. 'Robots and Jobs: Evidence from US Labor Markets'. *Journal of Political Economy* 128, no. 6 (June 2020): 2188–2244. <https://doi.org/10.1086/705716>.
- Belladonna, Aprillio Poppy, Yayuk Hidayah, and Neneng Tripuspita. 'Responding to The Challenges of The 2045 Golden Generation: Improving a Legal-Aware Golden Generation with a Cultural and Identity Education Approach'. *Edunesia: Jurnal Ilmiah Pendidikan* 4, no. 2 (8 May 2023): 868–861. <https://doi.org/10.51276/edu.v4i2.412>.
- Brynjolfsson, Erik, Wang Jin, and Xiupeng Wang. 'Information Technology, Firm Size, and Industrial Concentration'. Cambridge, MA: National Bureau of Economic Research, March 2023. <https://doi.org/10.3386/w31065>.
- Camangian, Patrick, and Stephanie Cariaga. 'Social and Emotional Learning Is Hegemonic Miseducation: Students Deserve Humanization Instead'. *Race Ethnicity and Education* 25, no. 7 (10 November 2022): 901–21. <https://doi.org/10.1080/13613324.2020.1798374>.
- Chan, Zenobia C.Y. 'A Systematic Review of Creative Thinking/Creativity in Nursing Education'. *Nurse Education Today* 33, no. 11 (November 2013): 1382–87. <https://doi.org/10.1016/j.nedt.2012.09.005>.
- Czapiewski, Konrad, and Krzysztof Janc. 'Education, Human Capital and Knowledge—The Paradigm Shift and Future Scenarios on Polish Rural Areas'. In *Three Decades of Transformation in the East-Central European Countryside*, edited by Jerzy Bański, 351–67. Cham: Springer International Publishing, 2019. https://doi.org/10.1007/978-3-030-21237-7_16.
- Dwyer, Christopher P., Michael J. Hogan, and Ian Stewart. 'An Integrated Critical Thinking Framework for the 21st Century'. *Thinking Skills and Creativity* 12 (June 2014): 43–52. <https://doi.org/10.1016/j.tsc.2013.12.004>.
- Egan, Arlene, Rebecca Maguire, Lauren Christophers, and Brendan Rooney. 'Developing Creativity in Higher Education for 21st Century Learners: A Protocol for a Scoping Review'. *International Journal of Educational Research* 82 (2017): 21–27. <https://doi.org/10.1016/j.ijer.2016.12.004>.
- Elihami, Elihami. 'Relationship between Nonformal Education and Islamic Education in the Context of 2045 Agenda towards Education 4.0 and Society 5.0: Bibliometric Analysis'. *Aksara: Jurnal Ilmu Pendidikan Nonformal* 8, no. 2 (6 May 2022): 985. <https://doi.org/10.37905/aksara.8.2.985-996.2022>.

- Fernandes Andry, Johanes, Filscha Nurprihatin, and Lydia Liliana. 'Supply Chain Mapping to Prepare Golden Generation 2045 for Future Technology Infrastructure'. Edited by B. Warsito, D. Sutiningsih, and F. Muhammad. *E3S Web of Conferences* 359 (2022): 05004. <https://doi.org/10.1051/e3sconf/202235905004>.
- Fidalgo, Patricia, Joan Thormann, Oleksandr Kulyk, and José Alberto Lencastre. 'Students' Perceptions on Distance Education: A Multinational Study'. *International Journal of Educational Technology in Higher Education* 17, no. 1 (December 2020): 18. <https://doi.org/10.1186/s41239-020-00194-2>.
- Gašević, Dragan, George Siemens, and Shazia Sadiq. 'Empowering Learners for the Age of Artificial Intelligence'. *Computers and Education: Artificial Intelligence* 4 (2023): 100130. <https://doi.org/10.1016/j.caeai.2023.100130>.
- Glikson, Ella, and Anita Williams Woolley. 'Human Trust in Artificial Intelligence: Review of Empirical Research'. *Academy of Management Annals* 14, no. 2 (July 2020): 627-60. <https://doi.org/10.5465/annals.2018.0057>.
- Greiff, Samuel, Christoph Niepel, and Sascha Wüstenberg. '21st Century Skills: International Advancements and Recent Developments'. *Thinking Skills and Creativity* 18 (December 2015): 1-3. <https://doi.org/10.1016/j.tsc.2015.04.007>.
- Ladson-Billings, Gloria. 'Culturally Relevant Pedagogy 2.0: A.k.a. the Remix'. *Harvard Educational Review* 84, no. 1 (1 April 2014): 74-84. <https://doi.org/10.17763/haer.84.1.p2rj131485484751>.
- LaRose, Robert, Jennifer L. Gregg, Sharon Stover, Joseph Straubhaar, and Serena Carpenter. 'Closing the Rural Broadband Gap: Promoting Adoption of the Internet in Rural America'. *Telecommunications Policy* 31, no. 6-7 (July 2007): 359-73. <https://doi.org/10.1016/j.telpol.2007.04.004>.
- Latypova, Endzhe A. 'Social and Cultural Determinants of the Dynamics of Education in a Multicultural and Multilingual Environment: Factors That Set the Dynamics'. *Prepodavatel XXI Vek*, no. 3-1 (2022): 67-80. <https://doi.org/10.31862/2073-9613-2022-3-67-80>.
- Leal Filho, W., S. Raath, B. Lazzarini, V.R. Vargas, L. De Souza, R. Anholon, O.L.G. Quelhas, R. Haddad, M. Klavins, and V.L. Orlovic. 'The Role of Transformation in Learning and Education for Sustainability'. *Journal of Cleaner Production* 199 (October 2018): 286-95. <https://doi.org/10.1016/j.jclepro.2018.07.017>.
- Listyaningsih, L, Septina Alrianingrum, and S Sumarno. 'Preparing Independent Golden Millennial Generation Through Character Education': Mataram, Indonesia, 2021. <https://doi.org/10.2991/assehr.k.210525.066>.
- Loveless, Avril, Jeremy Burton, and Keith Turvey. 'Developing Conceptual Frameworks for Creativity, ICT and Teacher Education'. *Thinking Skills and Creativity* 1, no. 1 (April 2006): 3-13. <https://doi.org/10.1016/j.tsc.2005.07.001>.

- Micha, Renata, Dimitra Karageorgou, Ioanna Bakogianni, Eirini Trichia, Laurie P. Whitsel, Mary Story, Jose L. Peñalvo, and Dariush Mozaffarian. 'Effectiveness of School Food Environment Policies on Children's Dietary Behaviors: A Systematic Review and Meta-Analysis'. Edited by Manuel Portero-Otin. PLOS ONE 13, no. 3 (29 March 2018): e0194555. <https://doi.org/10.1371/journal.pone.0194555>.
- Mortari, Luigina. 'Reflectivity in Research Practice: An Overview of Different Perspectives'. International Journal of Qualitative Methods 14, no. 5 (9 December 2015): 160940691561804. <https://doi.org/10.1177/1609406915618045>.
- Núñez-Canal, Margarita, Ma De Las Mercedes De Obesso, and Carlos Alberto Pérez-Rivero. 'New Challenges in Higher Education: A Study of the Digital Competence of Educators in Covid Times'. Technological Forecasting and Social Change 174 (January 2022): 121270. <https://doi.org/10.1016/j.techfore.2021.121270>.
- Pakdaman, Mohsen, Maryam Nazari Moghadam, Hamid Reza Dehghan, Arezoo Dehghani, and Mahdieh Namayandeh. 'Evaluation of the Cost-Effectiveness of Virtual and Traditional Education Models in Higher Education: A Systematic Review'. Health Technology Assessment in Action, 13 March 2021. <https://doi.org/10.18502/htaa.v3i1.5715>.
- Rahmatullah, Azam Syukur, E. Mulyasa, Syahrani Syahrani, Fien Pongpalilu, and Riana Eka Putri. 'Digital Era 4.0: The Contribution to Education and Student Psychology'. Linguistics and Culture Review 6 (2 January 2022): 89-107. <https://doi.org/10.21744/lingcure.v6nS3.2064>.
- Retnasari, Lisa, Dewi Setyaningrum, and Danang Prasetyo. 'Culture of the School Literacy Movement (GLS) for Students in Elementary Schools to Realize the 2045 Golden Generation'. Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran 8, no. 1 (22 February 2022): 179. <https://doi.org/10.33394/jk.v8i1.4448>.
- Rijal, Syamsu, Muhammad Arifin, Margaretha W Rante, Muhammad Musawantoro, and Muh Zainuddin Badollahi. 'Existence of Tourism Higher Education under the Ministry of Tourism and Creative Economy (PTNP) toward Indonesia's Golden Generation 2045'. Linguistics and Culture Review 6 (14 January 2022): 338-53. <https://doi.org/10.21744/lingcure.v6nS2.2111>.
- Riyanti, Erni Dewi, Fakhriyah Tri Astuti, Putri Jannatur Rahmah, and Haerini Ayatina. 'The Role of Pancasila Education in Shaping Youth's Character Towards Golden Indonesia 2045'. In Proceedings of the 1st Progress in Social Science, Humanities and Education Research Symposium (PSSHERS 2019). Padang, Indonesia: Atlantis Press, 2020. <https://doi.org/10.2991/assehr.k.200824.242>.
- Rokhman, Fathur, M. Hum, Ahmad Syaifudin, and Yuliati. 'Character Education for Golden Generation 2045 (National Character Building for Indonesian Golden Years)'. Procedia - Social and Behavioral Sciences 141 (August 2014): 1161-65. <https://doi.org/10.1016/j.sbspro.2014.05.197>.

- Santamaría, Lorri J. 'Critical Change for the Greater Good: Multicultural Perceptions in Educational Leadership Toward Social Justice and Equity'. *Educational Administration Quarterly* 50, no. 3 (August 2014): 347-91. <https://doi.org/10.1177/0013161X13505287>.
- Snoswell, Aaron J., Lucinda Nelson, Hao Xue, Flora D. Salim, Nicolas Suzor, and Jean Burgess. 'Measuring Misogyny in Natural Language Generation: Preliminary Results from a Case Study on Two Reddit Communities', 2023. <https://doi.org/10.48550/ARXIV.2312.03330>.
- Sumarti, Sumarti. 'The Storytelling Method for the Development of Language Skills in the Industrial Age 4.0 Towards the Golden Generation in 2045'. *Hortatori: Jurnal Pendidikan Bahasa Dan Sastra Indonesia* 6, no. 2 (31 December 2022): 153-59. <https://doi.org/10.30998/jh.v6i1.984>.
- Watterston, Jim, and Yong Zhao. 'Rethinking the Time Spent at School: Could Flexibility Improve Engagement and Performance for Students and Teachers?' *PROSPECTS*, 3 May 2023. <https://doi.org/10.1007/s11125-023-09638-9>.