

Equitable Higher Education Transformation: Creating Space as a Catalyst for Change in a New Era

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Abstract:

The transformation of equitable higher education institutions is a necessity to face various global challenges and social dynamics in the new era. This new era emphasizes digital literacy, technology integration in the curriculum, and flexibility in educational access. This study uses a qualitative research with a case study approach. Data were collected through interviews, observations, and documentation. Data were analyzed thematically to identify various patterns of change, challenges, and opportunities. The results show that the transformation of equitable higher education institutions focuses not only on structural reforms and policies, but also on the philosophical context, socio-cultural values, and the provision of physical and digital spaces that support collaboration, participation, and innovation. Optimal and strategic spatial dimensions can accelerate inclusivity, strengthen academic participation, and increase university responsiveness to community needs. This research has implications for providing a conceptual framework related to the spatial dimension as a dynamic agent in realizing justice, inclusivity, and sustainability in the new era.

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INTRODUCTION

Higher education, as mandated by law, plays a highly strategic role in achieving educational goals focused on the sustainable cultivation and empowerment of the Indonesian nation (Abdullah & Annisah, 2023). Naturally, in carrying out this role, various demands and challenges are encountered. The Director General of Higher Education and Technology stated that there are three fundamental problems in higher education in Indonesia: inequality of access, inequality of quality, and lack of relevance of higher education (Kayyali, 2023). Upon closer examination, these problems are not unique to Indonesia but are a global issue. This is reinforced by a study conducted by Teixeira et al (2021) in four countries: Ethiopia, Peru, Vietnam, and India, which found



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that these four countries have low opportunities and participation in accessing higher education due to their low and middle economic status.

The study confirms that the resulting inequality will create a social divide that impacts the provision of learning opportunities, thus potentially widening the socio-economic gap. On the other hand, inaccurate responses to the needs of the workforce and technological developments pose serious problems that impact the readiness of graduates to compete in the era of globalization. BPS (2025) recorded that as of February 2025, the Open Unemployment Rate (TPT) was 4.76%, with 5.73% occurring in urban areas. This data indicates that of the total national unemployment of 7.28 million people, more than 1 million are college graduates (Saykili, 2023; Siti Nur Patimah & Moh. Ibnu Faruk Fauzi, 2023). This high unemployment rate for graduates reflects a mismatch between graduate competencies and current job market needs, so graduates often struggle to find relevant jobs.

This situation underscores the importance of equitable higher education transformation, which focuses not only on improving access and quality of education but also on creating learning spaces responsive to technological changes and the demands of the workplace. Universities must be catalysts for change, producing quality graduates who are prepared to face global challenges and play an active role in national development. The urgency of this transformation is becoming increasingly clear as universities must prepare graduates who are adaptive, creative, and globally competitive, and who are able to utilize digital technology and new knowledge as key assets in the new era of higher education and the world of work. Equitable universities must emerge as spaces of opportunity that open access and improve the quality of education equitably, especially for groups that have been underserved, so that they can become agents of social and economic change with broad impact (Contreras & Gil, 2020; Fadhli, 2020; Stukalo & Lytvyn, 2021)

This context provides an understanding that this article will explain in more depth regarding the strategic role of higher education institutions in accordance with Law Number 12 (2012) by formulating a model for equitable higher education transformation so that it can create space as a catalyst for change in the new era.

RESEARCH METHOD

This research uses a qualitative approach with a case study method to gain an in-depth understanding of the phenomenon under study within a real-world context. The case study approach was chosen because it allows researchers to explore the subject in detail, exploring the processes, interactions, and contexts that influence developments or changes. This approach allows the information obtained to be not only numerical but also rich descriptions and narratives that provide comprehensive context (Irman et al., 2023).

Data collection was conducted through three main techniques: interviews, observation, and documentation. Interviews were used to directly explore participants' views, experiences, and perceptions, providing in-depth insights from the perspectives of the individuals involved. Observations were conducted to obtain data naturally in real-life situations, allowing for direct observation of behavior and interactions without

excessive intervention. Furthermore, data collection through documentation such as notes, reports, or related archives enriched the information sources, thus strengthening the validity and credibility of the data.

After data collection, a thematic analysis is conducted to identify emerging patterns, including changes that occurred, challenges faced, and opportunities within the context of the case study. Thematic analysis allows researchers to group various data into relevant themes to systematically understand the phenomenon.

RESULT AND DISCUSSION

Result

All interview material was processed and analyzed by classifying it into relevant themes. The next process was directed at an overall description of the focus area by extracting quotes from the entire interview transcript using the keywords "transformation," "philosophical context," "higher education," "catalyst," "digital space," "justice," "inclusive," "fair," "new era," "21st century," and "change." The extracted quotes encompassed the entire conversation on the topic of equitable higher education transformation. This is further described in Table 1.

Table 1. Themes and Categories

Theme	Category
	Thinking paradigm
Creation of Space in the Context of Philosophical and Socio-Cultural Values	Formulation of vision and mission as a basis for determining academic policies and practices
	Formation of emancipatory space in education
	Use of technology accompanied by digital literacy
Availability of Physical and Digital Space	Fulfillment of access and inclusive physical space design
	Participation and collaboration across geographical and social boundaries

Source: Research Data, 2025

The research results show that equitable transformation of higher education is not only at the level of structural reform and policy, but is indicated in several things, namely:

Creation of Space in the Context of Philosophical and Socio-Cultural Values

The research findings show that the creation of equitable spaces within higher education begins with a deep philosophical understanding and socio-cultural values. This provides an understanding that transformation is not merely structural or administrative, but involves renewing the understanding, values, and meanings that underlie the existence of an institution or system. Furthermore, transformation within a philosophical context emphasizes profound changes in the paradigms of thinking,

vision, and mission that guide the establishment of academic policies and practices. This aligns with MT's opinion,

"...talking about higher education isn't just about how students can find jobs, but rather about how higher education contributes to the development of a civilization that embraces the values of social justice and sustainability. Of course, at the very least, higher education can serve as an arena for critical reflection and social dialogue, connecting universal values with local wisdom..." (WMT01)

This contextual understanding provides the perspective that universities are institutions that actively build collective awareness about the importance of social justice and sustainability. Conceptually, individuals will be strengthened as agents of change, so that transformation within a philosophical context has implications for the formation of institutions that harmonize universal values and local character, reflecting and adjusting their vision, mission, and operations to effectively present the values of justice, inclusivity, and sustainability in their environment and surrounding communities.

In this new era, philosophical transformation and sociocultural values will provide strategic guidance to ensure universities can adapt without losing their essence as institutions that support the holistic development of human resources. Furthermore, philosophical transformation emphasizes the importance of a strong value framework so that scientific and technological developments remain oriented toward humanitarian values and a high level of justice (Fadhli, 2020; Shoofiya et al., 2024)

This is in line with Hidayah et al (2024) who stated that the 21st century is a century that is oriented towards quality in all efforts and results of human work. This orientation provides a demand for quality human resources which are certainly also produced by various professionally managed institutions which require a new paradigm to face various new challenges. Contextually, progressive and positive changes in perspective and paradigm have become a trend in institutional management.

A study conducted by Hidayah et al (2024) found that Ki Hajar Dewantara's philosophy with "ing ngarso sung tulodo, ing madyo mangun karso, tut wuri handayani" plays a role in building the character of the young generation who are globally competitive without losing their national identity by making education a strategic instrument in forming a society that is adaptive, just, and has an awareness of human values and is capable of using technology that advances society in an inclusive and sustainable manner.

In addition to the application of values, philosophical transformation has led to the understanding that higher education institutions are not merely producers of knowledge, but also spaces of emancipation that position education as a fundamental right of every individual, emphasizing access, participation, and opportunities for self-development in a more open manner, regardless of social, economic, or cultural background. This aligns with the opinion of MN.

"...this philosophical context is deep, sir, because its impact is deeply rooted, oriented towards the values and beliefs that are practiced. In the past, college had the stigma of being expensive, exclusive, and elite, yes... but as time has

passed, college is a basic right, especially in Islam, which always emphasizes thinking, and this can be done through the educational process. Of course, this has an impact on the governance of quality educational institutions to achieve quality results as well. Curriculum planning is needed, stakeholders, and all are inseparable. And most importantly, the concept that education is a basic right that must be fulfilled..." (WMN-02)

Faisol (2024) stated that there are three main themes found in identifying paradigm shifts in dealing with inequality regimes that can be pursued substantially, especially related to gender equality issues, namely (1) problems and solutions that include gender-based discrimination, numerical balance in the context of numerical balance, proportional distribution, to data-based equality, and changes in gender equality issues that include policy changes, changes in views or discourse, to changes in practice; (2) Individual perspectives that include explanations of a phenomenon, issues about quality related to competence and gender instruments in certain matters, and self-confidence; and (3) Ignoring or expanding gender equality issues that include the view that gender equality issues are considered finished or irrelevant, and a broader perspective on inclusion not only about gender but also other aspects.

In general, the philosophy emphasizes respect for cultural diversity and prevailing social values within society. Equitable higher education institutions act as agents of social change, connecting universal values with local contexts, thus maintaining institutional identity while adapting to the dynamics of the times.

Availability of Physical and Digital Space

One component of creating equitable higher education transformation includes the availability of physical and digital spaces. In the context of the new era, higher education transformation serves as a crucial catalyst, driving accelerated change and innovation in education, research, and community service. This catalyst is realized through the adoption of digital technology, which is a key driver of the paradigm shift in higher education, enabling far greater flexibility, accessibility, and inclusivity than in previous eras. Digital transformation facilitates online learning, data-driven academic management systems, and cross-disciplinary and cross-geographic collaboration, making higher education centers responsive to global demands and local needs (Sulala, 2023; Dinda Febrianti Putri & Hina, 2024).

Furthermore, universities also serve as catalysts for social and economic development by supporting research and technological development relevant to the needs of society and industry. In this role, universities not only prepare competent human resources but also initiate innovative solutions to contemporary problems, strengthening connectivity between academia, government, and industry. This transformation requires universities to uphold the values of justice and inclusivity to reach diverse groups in society with equitable access to quality education.

In the new era, transformed universities serve as the primary driving force accelerating educational progress, innovation potential, and sustainable development. This catalytic function ensures that universities can adapt and lead in effectively addressing the dynamics of global change, and become agents of inclusive and equitable social change. The transformation of universities in the new era serves as a

primary catalyst for accelerating change and innovation in education, research, and community service. Digital technology is a key driver of this transformation, enabling universities to provide more flexible, inclusive, and accessible learning, as well as optimizing collaboration across disciplines and geographies. Thus, universities can respond simultaneously to global demands and local needs, strengthening their role as centers of 21st-century innovation and learning (Hefniy, 2024; Qushwa, 2024; Putri & Hasan Jali, 2025).

In addition to driving academic progress, universities also serve as catalysts for socio-economic development through applied research and technology development relevant to the needs of society and industry. Through collaboration with various stakeholders, universities accelerate the dissemination of innovations and impactful social solutions, while ensuring equitable and equal access to education for all levels of society.

With this catalytic role, universities in the new era can become drivers of adaptive and sustainable change, integrating the values of justice, inclusivity, and sustainability. This makes universities not merely educational institutions but also agents of significant social transformation in facing global change and future challenges. Research findings identify that the transformation of physical and digital spaces falls into three categories: first, The use of technology coupled with digital literacy, namely the equitable mastery of technology, is a primary requirement for all academics to access learning resources and digital services without barriers. This creates an inclusive and equitable learning ecosystem, thereby promoting equitable access to education. Furthermore, enhanced digital literacy encompasses not only technical skills but also a critical understanding of technology use, enabling academics with high digital literacy to utilize technology optimally, including for research, collaboration, and independent competency development.

Second, Providing access and designing inclusive physical spaces in the equitable transformation of higher education institutions is based on the principles of planning and designing spaces that are accessible and usable by the entire academic community, without exception, including people with disabilities. Classroom and service area arrangements that consider diverse user needs contribute to the creation of inclusive physical spaces. Spaces must be designed with a layout that provides sufficient space for movement and facilitates interaction, without physical barriers.

Participation and collaboration across geographic and social boundaries are crucial strategies for strengthening the quality of higher education and expanding equitable access. Collaboration across universities located in different geographic regions and with diverse social backgrounds enables a broader exchange of knowledge, resources, and academic experiences. This enriches curricula, teaching methods, and research, resulting in a more inclusive education system that is responsive to global and local needs. Active participation in these collaborations, such as joint research, student and faculty exchanges, and cross-institutional internship programs, enhances the scientific capacity and skills of academics while strengthening social and professional networks across regions and countries. This collaboration also enables universities to access more adequate facilities, technology, and funding and opens up opportunities

for multidisciplinary and cross-cultural innovation that supports educational equity.

DISCUSSION

The findings of this study reveal that the equitable transformation of higher education extends beyond policy and structural reform, encompassing deep philosophical and socio-cultural shifts that redefine the mission and values of universities. Transformation in this context represents a process of reinterpreting the purpose of education as a medium for justice, inclusivity, and human development. The creation of educational spaces grounded in philosophical and socio-cultural values demonstrates that universities must not only function as institutions of knowledge production but also as agents of emancipation that uphold education as a fundamental human right. This aligns with the view that higher education should serve as a space for critical reflection, moral cultivation, and the realization of social justice (Qushwa, 2023; Hasanah et al., 2024). By integrating universal values with local wisdom, higher education institutions can harmonize intellectual excellence and moral consciousness, creating an environment that is both transformative and culturally grounded.

In the philosophical and value-based dimension, transformation encourages universities to reconstruct their vision and mission to align with justice-oriented paradigms. This process is not limited to administrative or structural reform but penetrates deeper into the way academic communities understand their social role. As reflected in the statements of research participants, transformation is understood as a moral and intellectual movement that seeks to eliminate the elitist stigma of higher education, replacing it with inclusive access for all (Munawwaroh & Baharun, 2024; Putri et al., 2024). This aligns with the thoughts of Ki Hajar Dewantara, who emphasized education as a means of cultivating character and social awareness. Through this philosophical transformation, universities function not merely as career preparation institutions but as catalysts for developing a just, sustainable, and human-centered civilization.

Another critical finding lies in the transformation of physical and digital spaces as an embodiment of inclusivity and accessibility. In the digital era, universities act as catalysts for innovation, ensuring that education, research, and community service are accessible to all segments of society. The integration of digital technology into higher education provides flexibility and inclusivity, enabling learning and collaboration across geographic and social boundaries (Mikkonen et al., 2020; Roche et al., 2020). The development of digital literacy among academics is not merely technical competence but a critical understanding of technology as a tool for empowerment. This finding underscores the importance of equitable access to digital infrastructure and the design of inclusive physical environments that accommodate the needs of all learners, including those with disabilities. The transformation of space both physical and virtual thus becomes a strategic foundation for achieving fairness and equality in higher education (Fitriani et al., 2023; Bukhori Muslim et al., 2024; Luo et al., 2024).

Finally, the study highlights that collaboration and participation across geographic and social boundaries are essential in realizing equitable transformation in higher education. Collaborative partnerships between institutions across regions and

countries allow for the sharing of resources, expertise, and best practices that enhance the quality and inclusiveness of education. These collaborations foster innovation through joint research, academic exchanges, and cross-disciplinary initiatives that integrate global knowledge with local contexts. By positioning themselves as dynamic centers of innovation, universities become agents of adaptive and sustainable change capable of addressing contemporary challenges (Bellino, 2021; Alhazzaa & Yan, 2025). Therefore, equitable higher education transformation is not only about institutional adaptation to modernization but also about reaffirming the moral and social responsibility of universities to ensure justice, inclusivity, and sustainability for all members of society.

CONCLUSION

The conclusion of the research results on the transformation of equitable higher education emphasizes that transformation does not only focus on structural and policy aspects, but also on creating inclusive and equitable spaces in philosophical, social, cultural, physical, and digital contexts.

First, transformation begins with a deep philosophical understanding and sociocultural values that strengthen the institution's paradigm of thought, vision, and mission. Equitable higher education becomes an arena for critical reflection that connects universal values with local wisdom, strengthening the role of higher education as an agent of social change that builds collective awareness of social justice and sustainability.

Second, transforming physical and digital spaces into catalysts for change by providing inclusive access and facilities. The use of digital technology coupled with digital literacy enables equitable and optimal access to education. Inclusive physical space design ensures that every member of the academic community, including those with disabilities, can use facilities without barriers.

Third, participation and collaboration across geographic and social boundaries are crucial strategies for strengthening the quality of education and expanding equal access. Collaboration between universities across disciplines and regions supports the exchange of resources, innovation, and capacity building of the broader academic community.

Future recommendations include the need to develop programs and policies that strengthen the synergy between philosophical and practical transformations, strengthen digital literacy, improve inclusive physical infrastructure, and expand cross-border collaboration. Future research could delve deeper into the implementation of these transformations in regional and global contexts, as well as evaluate their impact on equity and quality in higher education. Thus, the transformation of equitable higher education plays a strategic role in forming adaptive, inclusive, and sustainable educational institutions to face the challenges of the 21st century.

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REFERENCES

Abdullah, A., & Annisah, I. (2023). Building Santri Loyalty Through Total Quality Service in Pesantren. *Qulubana: Jurnal Manajemen Dakwah*, 4(1), 130–146. <https://doi.org/10.54396/qlb.v4i1.992>

Alhazzaa, K., & Yan, W. (2025). Immersive technologies in Education: Exploring user experience and engagement in building energy simulations through AR and VR. *Computers and Education: X Reality*, 6. <https://doi.org/10.1016/j.cexr.2025.100097>

Bellino, M. J. (2021). Education, merit and mobility: Opportunities and aspirations of refugee youth in Kenya's Kakuma refugee camp. *British Educational Research Journal*, 47(4), 817–835. <https://doi.org/10.1002/berj.3695>

Bukhori Muslim, A., Arroisi, J., Jan, J. M., & Ramazani, R. (2024). Indonesian pesantren-affiliated higher education: universal Islamic values to develop locally engaged but globally oriented multilingual graduates. *Research in Post-Compulsory Education*, 29(1), 138–157. <https://doi.org/10.1080/13596748.2023.2285633>

Contreras, F. A. G., & Gil, E. G. (2020). Typology of the universities colombian and typical of his corporate government, a review from his bylaws. *Fronteiras*, 9(3), 220–238. <https://doi.org/10.21664/2238-8869.2020v9i3.p220-238>

Culatto, A., & Summerton, C. B. (2015). Spirituality and Health Education: A National Survey of Academic Leaders UK. *Journal of Religion and Health*, 54(6), 2269–2275. <https://doi.org/10.1007/s10943-014-9974-4>

Dinda Febrianti Putri, & Hina, S. (2024). School Zoning Policy Controversy In Elementary Education. *EDUCARE: Jurnal Ilmu Pendidikan*, 3(1), 1–11. <https://doi.org/10.71392/ejip.v3i1.70>

Fadhl, M. (2020). Sistem Penjaminan Mutu Internal Dan Eksternal Pada Lembaga Pendidikan Tinggi. *AL-TANZIM: Jurnal Manajemen Pendidikan Islam*, 4(2), 53–65. <https://doi.org/10.33650/al-tanzim.v4i2.1148>

Faisol, M. (2024). *Revitalization of Islamic Values in Forming a Generation with Character in the Era of Social Transformation*. 02(01), 1–14. <https://doi.org/10.61987/jsse.v2i1.518>

Fitriani, Q., Mukhibat, M., Kirana, D. P., & Harsoyo, R. (2023). Managerial Competence of Madrasah Principals in the Development of Educators and Education Personnel in Madiun, Indonesia. In *International Journal of Social Science and Education Research Studies* (Vol. 03, Issue 07). ijssers.org. <https://doi.org/10.55677/ijssers/v03i7y2023-40>

Hasanah, R., Munawwaroh, I., & Agus R, A. H. (2024). Pengembangan Career

Adaptability Melalui Inovasi Sumber Daya Manusia. *EDUKASIA: Jurnal Pendidikan Dan Pembelajaran*, 5(1), 169–178. <https://doi.org/10.62775/edukasia.v5i1.734>

Hefniy. (2024). Spirituality-Based Leadership Transformation in Building Inclusive Schools: A Case Study of Efforts to Improve the Quality of Education in the Midst of Social Challenges. *Managere Indonesian Journal of Educational Management*, 6(No.2 (2024)), 179–193.

Hidayah, H., Munawwaroh, I., Putri, D. F., & Hasanah, R. (2024). Leadership Transformation and Organizational Strengthening in Improving Collaboration and Operational Effectiveness of Islamic Boarding Schools. *Journal of Social Studies and Education*, 1(2), 126–139.

Irman, I., Wasliman, I., Warta, W., & Naufal, S. M. R. (2023). Management of The Implementation of The National Curriculum Based on Islamic Boarding School Education To Improve The Quality of Madrasah Aliyah (Descriptive Analytical Study at MA Al-Masthuriyah, MA Sunanul Huda, MA Al-Amin, Sukabumi Regency). *Jhss (Journal of Humanities and Social Studies)*, 7(1), 022–029. <https://doi.org/10.33751/jhss.v7i1.7234>

Kayyali, M. (2023). The Evolution of Quality Assurance Systems in Higher Education. *International Journal of Innovation and Research*, 2(1), 1–9.

Luo, H., Li, X., Zhang, J., Zhang, F., Liang, J., & Yin, X. (2024). Metaverse improves the learning experiences rather than learning outcomes: Evidence from an experimental study in higher education. In *Proceedings - 2024 International Symposium on Educational Technology, ISET 2024* (pp. 217–222). <https://doi.org/10.1109/ISET61814.2024.00050>

Mikkonen, K., Tuomikoski, A. M., Sjögren, T., Koivula, M., Koskimäki, M., Lähteenmäki, M. L., Mäki-Hakola, H., Wallin, O., Sormunen, M., Saaranen, T., Koskinen, C., Koskinen, M., Salminen, L., Holopainen, A., & Kääriäinen, M. (2020). Development and testing of an instrument (HeSoEduCo) for health and social care educators' competence in professional education. *Nurse Education Today*, 84. <https://doi.org/10.1016/j.nedt.2019.104239>

Munawwaroh, I., & Baharun, H. (2024). Communautaire : Journal of Community Service Assistance for the Furudul Ainiyah Program to Improve the Quality of Madrasah Graduates. *Journal of Community Service*, 03(02), 179–191.

Onia, S. I. (2024). AI Innovation in Education: Realizing Personalized Learning in the Digital Age. *Educative: Jurnal Ilmiah Pendidikan*, 2(3), 178–187.

Putri, D. F., Agus R, A. H., Setiawan Putri, D. M., Widiasari, F., Zahro, F., & Baharun, H. (2024). Behaviour Management in the Classroom: Improving the Quality of Education through Systematic Optimization of the Learning Environment. *FALASIFA: Jurnal Studi Keislaman*, 15(1), 35–47. <https://doi.org/10.62097/falasifa.v15i1.1787>

Putri, D. F., & Hasan Jali. (2025). Integration of Teacher Exemplary Behavior in Character Education to Build A Globally Perspective Madrasah Generation. *EDUCARE: Jurnal Ilmu Pendidikan*, 4(1), 1–13. <https://doi.org/10.71392/ejip.v4i1.69>

Qushwa, F. G. (2023). Integration of Artificial Intelligence in Online Learning: Analyzing the Impact on Student Learning Outcomes. *International Journal of Instructional Technology*, 2(2), 11–21.

Qushwa, F. G. (2024). Optimizing Human Potential: Integrating Human Resource Management Based On. *Proceeding Of International Conference On Education*, 02(01), 1305–1317.

Roche, J., Bell, L., Galvão, C., Golumbic, Y. N., Kloetzer, L., Knoben, N., Laakso, M., Lorke, J., Mannion, G., Massetti, L., Mauchline, A., Pata, K., Ruck, A., Taraba, P., & Winter, S. (2020). Citizen Science, Education, and Learning: Challenges and Opportunities. *Frontiers in Sociology*, 5. <https://doi.org/10.3389/fsoc.2020.613814>

Saykili, A. (2023). Talking The Quality Talk , Walking The Quality Walk : Developing An Online Quality Assurance Training Program. *INTE-ISTEC-ITEC-ITICAM-IQC*, 2(2015), 760–772.

Shoofiya, G. Z., Yamin, I., & Baharun, H. (2024). Management of Teaching Personnel in Improving the Quality of Education: a Case Study At Muhammadiyah 1 Besuki Integrated Elementary School. *Proceeding of International Conference on Education, Society and Humanity*, 02(1), 1428–1434. <https://www.semanticscholar.org/paper/MANAGEMENT-OF-TEACHING-PERSONNEL-IN-IMPROVING-THE-A-Shoofiya-Yamin/9f481405ea07831ffdade14787e18f732ea3e57d>

Siti Nur Patimah, & Moh. Ibnu Faruk Fauzi. (2023). Manajemen Hubungan Masyarakat dalam Mengembangkan Sarana dan Prasarana di Lembaga Pendidikan. *Jurnal Insan Pendidikan Dan Sosial Humaniora*, 1(4), 94–108. <https://doi.org/10.59581/jipsoshum-widyakarya.v1i4.1651>

Stukalo, N., & Lytvyn, M. (2021). Towards Sustainable Development through Higher Education Quality Assurance. *Education Sciences*.

Sulala, A. (2023). Teams Games Tournament Learning Model; Efforts in Improving Students' Way of Thinking. *EDUCARE: Jurnal Ilmu Pendidikan*, 2(2), 86–99. <https://doi.org/10.71392/ejip.v2i2.77>

Teixeira, A. F., Gonçalves, M. J. A., & Taylor, M. de L. M. (2021). How higher education institutions are driving to digital transformation: A case study. *Education Sciences*, 11(10). <https://doi.org/10.3390/educsci11100636>