

Vol. 02 No. 02 (2024) Available online at https://ejournal.unuja.ac.id/index.php/icesh

FACING THE GLOBAL WORLD OF WORK: CURRICULUM TRANSFORMATION THAT ALIGNS HARD SKILLS AND SOFT SKILLS

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Abstract:

Curriculum transformation that harmonizes the development of hard and soft skills is a strategic step in preparing individuals to face the demands of the global workforce. Hard skills, such as technical and analytical abilities, are needed to master specific jobs, while soft skills, such as communication, teamwork and adaptability, are key to success in a dynamic and collaborative work environment. This research aims to explore the principles, challenges and strategies of curriculum transformation that can integrate both types of skills in a balanced way. Through literature analysis and case studies, it was found that collaboration between educational institutions, industry and society is essential in creating a relevant and applicable curriculum. This transformational curriculum produces graduates who are not only technically competent, but also have strong interpersonal skills, making them ready to compete in the global job market. The results of this study contribute to the development of an inclusive and sustainable education model.

Keywords: Curriculum Transformation, Hard Skills and Soft Skills

INTRODUCTION

In the era of globalization and industrial revolution 4.0, the world of work is experiencing significant changes with increasing complexity, workforce mobility, and global competition (Kurt, 2019), (Postelnicu & Câlea, 2019). Companies today are not only looking for individuals with technical expertise (hard skills), but also those with interpersonal, communication, leadership and adaptability skills (soft skills). This challenge is increasingly evident in various sectors, where it is not enough for the workforce to be technically proficient but must also be able to work collaboratively and innovatively. Unfortunately, the education system in many countries, including Indonesia, still tends to emphasize teaching hard skills, while the development of soft skills is often neglected (Setiawan Wibowo et al., 2020), (Raco et al., 2022). This has led to many graduates being underprepared for the needs of the modern workforce. Therefore, curriculum transformation to harmonize hard and soft skills is crucial to ensure graduates have holistic competencies that are relevant to global needs.

Previous studies have identified the importance of mastering both hard and soft skills in the world of work (Putra et al., 2020), (Ragusa et al., 2022). These studies show that hard skills, such as analytical, technical and digital abilities, provide the foundation of competencies required in a particular job. Meanwhile, soft skills, such as communication, teamwork, leadership and emotional intelligence, are considered essential to support an individual's long-term success (Poláková et al., 2023), (Mattajang, 2023). Nonetheless, these studies often address the two skills separately. The lack of integrated studies makes developing a curriculum that aligns the two a challenge. In addition, there are not many studies that discuss practical approaches to

involve various parties, such as educational institutions, industry and government, in designing a curriculum that is relevant to the demands of the global workforce. This research is here to fill that void.

This research aims to examine curriculum transformation that is able to harmonize the development of hard skills and soft skills to prepare graduates for the global workforce (Aimah & Nasih, 2024), (Aimah & Nasih, 2024). Some of the main questions to be answered are: (1) What are the basic principles that should be applied in curriculum transformation to harmonize hard skills and soft skills? (2) What factors influence the success of integrating these two types of skills in the curriculum? (3) What is the role of collaboration between educational institutions, the world of work, and the government in supporting this curriculum transformation? By answering these questions, this research is expected to provide a comprehensive framework for curriculum development that is more relevant to the needs of the future workforce.

This research argues that curriculum transformation that harmonizes hard skills and soft skills is a strategic step to create a competent and adaptive workforce in the global job market. An integratively designed curriculum can provide balanced learning, where graduates not only have strong technical skills but also qualified interpersonal skills. Collaboration across sectors, such as between educational institutions, industry and government, is a key element in supporting the implementation of a relevant and applicable curriculum (Gouëdard et al., 2020), (Mian et al., 2020), (Chiu et al., 2022). If implemented consistently, this approach can improve individual competitiveness, accelerate the development of quality human resources, and support the achievement of sustainable development goals (Kalfas et al., 2023), (Olabi et al., 2023). This research makes a significant contribution to education policy and the development of future learning models that are inclusive and oriented to global needs.

RESEARCH METHODS

This research tries to understand the phenomenon in depth and explain how the curriculum transformation at SMK Darussalam Blokagung is intended to harmonize hard skills and soft skills. Therefore, a descriptive qualitative approach will be used in the research. The emphasis of this study is to describe the transformation process, constraints, and the effect of the transformation on students' readiness to face the challenges of the increasingly rigorous world of work in the era of globalization. This approach allows researchers to access, explain, and predict human thoughts, values, beliefs, and behaviors. It allows the researcher to experience the subject's perspective of the curriculum implementation process.

This research was conducted at SMK Darussalam Blokagung, a school located under the auspices of a boarding school and has a superior program in developing students' skills. The selection of this location is based on the school's background that combines religious values with practical skills, making it an interesting case study on the integration of hard skills and soft skills. In addition, SMK Darussalam has presented various programs related to the needs of the world of work, such as project training, cooperation in the business world, and character development. With this focus, SMK Darussalam is entrusted to provide complete data.

Table 1. Research Informants

Table 1. Research informatics						
No	Informant		Kode	Gender		Amount
				Man	Woman	
1	Leader SMK Darsal		Lea	2		3
2	Manager	SMK	Man	3		5
	Darsal					
3	Teacher	SMK	Tea	3		9
	Darsal					
4	Student	SMK	SS	4		6
	Darsal					
Tota	al					23

To ensure data validity, several techniques were used: Triangulation: using multiple data sources (interviews, observations, documentation) to verify information; member check: confirming findings and interpretations with informants to ensure accuracy and validity; audit trail: documenting in detail all steps and decisions taken during the research to enable replication and verification. The data analysis technique used was thematic analysis, which involved the following steps: data collection i.e. collecting data from interviews, observations, and documentation, coding: identifying and coding important themes from the data that has been collected. Categorization: grouping the codes into broader categories; theming: identifying the main themes that emerged from the categories; data interpretation: interpreting the meaning of the identified themes to answer the research questions; implementation plan: planning by developing a research plan, including informant identification, interview scheduling, and preparation of observation instruments, data collection by conducting interviews, observations, and document collection, data analysis by conducting thematic analysis of the collected data and reporting: compiling a research report that includes findings, interpretations, and recommendations.

RESULTS AND DISCUSSION

Education Curriculum Transformation

The curriculum transformation at SMK Darussalam Blokagung focuses on developing skills that are balanced between hard and soft skills. Taking into account the increasingly dynamic needs of the world of work, the curriculum is designed to integrate technical competencies in vocational fields as well as interpersonal abilities such as communication, teamwork and leadership. Project-based approaches and the use of learning technologies support the achievement of these goals. In addition, collaboration with local and global industries strengthens the relevance of the curriculum to market demands, preparing students to face a wider and more diverse range of professional challenges.

The curriculum transformation at SMK Darussalam Blokagung aims to produce graduates who are ready to face the evolving demands of the world of work. The curriculum emphasizes a balance between mastery of hard skills, such as technical skills in vocational fields, with much-needed soft skills, such as adaptability, communication, and leadership. The school also integrates project-based learning methods that allow students to learn through practical experience, as well as utilizing technology in the learning process. Collaboration with local industries further enriches the curriculum, ensuring that graduates have competencies that match the needs of a dynamic job market.

"We collaborate with various industries, especially those that are relevant to the majors in the school. This cooperation is very important as it gives students practical experience that is directly related to the world of work. Internship programs and industry visits are part of the curriculum, giving students the opportunity to learn from real experience. We also invite industry practitioners to give guest lectures, so that students can gain insights directly from experts in their fields". (Lea)

In an interview with the Principal of SMK Darussalam Blokagung, he explained that the school cooperates with various industries that are relevant to the existing majors. This cooperation aims to provide students with practical experience directly related to the world of work. Internship programs and industry visits are an integral part of the curriculum, giving students the opportunity to learn from real experiences and preparing them for professional challenges. In addition, the school also invites industry practitioners to give guest lectures, so that students can gain insights directly from experts in their fields, enriching their knowledge with the latest information and experiences from the industry.

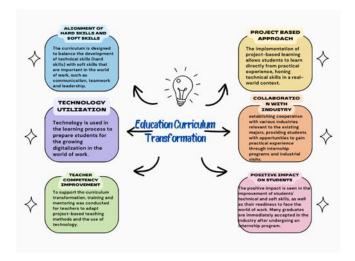


Figure 1: Education Curriculum Transformation

The picture shows that the curriculum transformation at SMK Darussalam Blokagung is designed to prepare students for the increasingly complex challenges of the global workplace. The curriculum balances the development of hard skills and soft skills, with a focus on technical skills appropriate to students' majors, as well as communication, teamwork and leadership abilities that are essential in the professional world. Project-based learning is applied to provide practical experience, while technology is used to introduce students to industry-relevant tools and platforms (Palmquist et al., 2024), (Shenoy & Kumar, 2024). In addition, the school establishes partnerships with industries to provide internship programs and industry visits that enrich students' horizons. Industry practitioners are also invited to give guest lectures, providing students with first-hand knowledge of the world of work. To support these changes, training and mentoring are provided to teachers. Updates to facilities and technology ensure students can practice using the latest industry tools (Alsalamah & Callinan, 2021), (Chiu et al., 2022). As a result, students are better prepared and many are successfully accepted into the workforce after graduation.

The Importance of Balancing Hard Skills and Soft Skills

At SMK Darussalam Blokagung, balancing hard and soft skills is a priority in the education curriculum. Hard skills are taught in accordance with existing majors, providing students with the technical skills necessary to enter the workforce. However, mastery of technical skills alone is not enough. Therefore, the development of soft skills such as communication skills, leadership, and teamwork is also emphasized. These non-technical skills are indispensable in the dynamic world of work, where adaptability and working with others are key success factors.

The alignment of these two types of skills allows students to not only be technically prepared, but also have good interpersonal qualities. In the professional world, the ability to communicate well and work in teams often determines success. Therefore, at SMK Darussalam Blokagung, in addition to vocational-based learning materials, activities that support the development of soft skills are also implemented in an integrated manner. Through this approach, students are prepared to face the challenges of the working world with more complete and competitive skills.

"We try to integrate soft skills development in every learning activity. For example, in group projects, students are trained to work together and manage tasks effectively. We also often hold group discussions and presentations that train their communication skills." (Tea)

The statement shows that at SMK Darussalam Blokagung, soft skills development is integrated in every learning activity. For example, in group projects, students are trained to cooperate and manage tasks effectively, which is important to prepare them to work in teams in the working world. In addition, activities such as group discussions and

presentations are regularly held to train students' communication skills. Through this approach, students not only learn to master technical skills, but also develop interpersonal abilities that are much needed in interacting and working in a professional environment, ensuring they are ready to face the challenges of the real world of work.

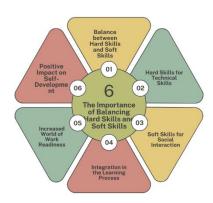


Figure 2: importance of balancing hard and soft skill

The balancing of hard and soft skills at SMK Darussalam Blokagung is essential to prepare students for the increasingly complex world of work. Hard skills provide students with technical skills specific to their majors, while soft skills, such as communication, teamwork, and leadership, complement their ability to interact in a professional environment. The integration of these two skills in the learning process, such as through group projects, discussions and presentations, helps students develop both technical and interpersonal skills (Дирюгина & Ясвин, 2024), (Chen, 2021). As a result, students who master both skills are more prepared and confident to enter the workforce, able to adapt, work with teams, and face professional challenges more effectively.

Impact of Curriculum Transformation on the World of Work

The impact of the curriculum transformation at SMK Darussalam Blokagung on the world of work is seen through the increased readiness of graduates to face industry challenges. With a curriculum that is more integrated between hard and soft skills, students are able to master technical skills according to the needs of the job market, while developing interpersonal skills that are important to adapt in a dynamic work environment. This makes graduates more competitive and ready to face the ever-evolving world of work.

In addition, a curriculum that emphasizes project-based learning and internships provides practical experience for students, increasing their confidence in communicating and working in teams. This transformation produces graduates who are not only technically skilled, but also have the ability to collaborate and solve problems that are essential in the global workplace.

"The curriculum transformation at SMK Darussalam Blokagung has had a positive effect on student readiness. We have integrated hard and soft skills in the curriculum, so that students not only master technical skills, but also communication, cooperation, and problem-solving abilities. This is the main asset for them to be able to compete in the increasingly complex and dynamic world of work."

The curriculum transformation at SMK Darussalam Blokagung has had a significant positive impact on students' readiness to enter the workforce. A curriculum that integrates hard and soft skills ensures students are not only proficient in industry-relevant technical skills, but also skilled in communication, teamwork, and problem

solving. This approach provides students with holistic capabilities, preparing them for the ever-evolving world of work. With strong technical skills and proficient interpersonal abilities, students are better equipped to compete and adapt in a complex and dynamic work environment, giving them an edge in the hiring process and contributing to the professional world.

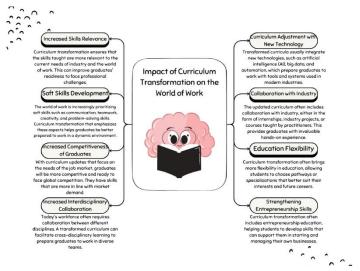


Figure 3: impact of curriculum transformation

The figure above shows that curriculum transformation has a significant impact on the world of work by increasing the relevance of skills taught, integrating new technologies, and developing soft skills required by industry. Collaboration with industry, educational flexibility, and increased graduate competitiveness are key to readiness for professional challenges. Adaptive curricula enable rapid response to changes in the job market, and facilitate cross-disciplinary collaboration. In addition, entrepreneurship education and strengthening critical thinking skills also prepare graduates to face job dynamics and manage global challenges (Pardo-Garcia & Barac, 2020), (Jackson et al., 2022). This transformation ensures graduates are more prepared and competitive in the world of work.

CONCLUSION

Research on curriculum transformation at SMK Darussalam Blokagung reveals the importance of aligning hard skills and soft skills to prepare students for the increasingly competitive global workforce. A curriculum that integrates these two skills helps students to not only master technical skills according to their field, but also develop communication, cooperation, leadership, and adaptation skills needed by the industry. With this approach, students are better prepared to face the demands of a fast-changing and dynamic world of work, and are able to compete in the global market.

In addition, this curriculum transformation provides opportunities for students to develop skills that are relevant to the latest technological developments and industry trends. Collaboration with the business world and the application of more practical learning methods enrich students' experience in facing real challenges in the field. As a result, SMK Darussalam Blokagung graduates are more competent and ready to contribute to the global workforce, strengthening their position in a job market that increasingly prioritizes quality and competitiveness.

REFERENCES

- Aimah, S., & Nasih, M. (2024). Transformation of Pesantren as Humanistic and Futuristic Educational Institutions. Journal of Research in Educational Management, 3(1), 1–10. https://journal.literasantri.com/index.php/jrem/article/view/84
- Alsalamah, A., & Callinan, C. (2021). Adaptation of Kirkpatrick's four-level model of training criteria to evaluate training programmes for head teachers. Education Sciences, 11(3). https://doi.org/10.3390/educsci11030116
- Chen, R. H. (2021). Fostering students' workplace communicative competence and collaborative mindset through an inquiry-based learning design. Education Sciences, 11(1), 1–13. https://doi.org/10.3390/educsci11010017
- Chiu, T. K. F., Meng, H., Chai, C. S., King, I., Wong, S., & Yam, Y. (2022). Creation and Evaluation of a Pretertiary Artificial Intelligence (AI) Curriculum. IEEE Transactions on Education, 65(1), 30–39. https://doi.org/10.1109/TE.2021.3085878
- Fitriyah, L., & Sholihah, I. (2023). Effective Human Resource Management Strategy: Improving Excellent Service For Competitive Advantage. Managere: Indonesian Journal of Educational Management, 5(2), 143–154.
- Gouëdard, P., Pont, B., Hyttinen, S., & Huang, P. (2020). Curriculum reform: A literature review to support effective implementation. OECD Education Working Papers, 239, 5–59.
- Jackson, D., Shan, H., & Meek, S. (2022). Enhancing graduates' enterprise capabilities through work-integrated learning in co-working spaces. Higher Education, 84(1), 101–120. https://doi.org/10.1007/s10734-021-00756-x
- Kalfas, D., Kalogiannidis, S., Chatzitheodoridis, F., & Toska, E. (2023). Urbanization and Land Use Planning for Achieving the Sustainable Development Goals (SDGs): A Case Study of Greece. Urban Science, 7(2), 1–23. https://doi.org/10.3390/urbansci7020043
- Kurt, R. (2019). Industry 4.0 in Terms of Industrial Relations and Its Impacts on Labour Life. Procedia Computer Science, 158, 590–601. https://doi.org/10.1016/j.procs.2019.09.093
- Mattajang, R. (2023). The Importance of Soft Skills Development in Human Resource Management. Rio Mattajang The Importance Of Soft Skills Development In Human Resource Management under a Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0). Jurnal Ekonomi, 12(04), 2023. http://ejournal.seaninstitute.or.id/index.php/Ekonomi
- Mian, S. H., Salah, B., Ameen, W., Moiduddin, K., & Alkhalefah, H. (2020). Adapting universities for sustainability education in industry 4.0: Channel of challenges and opportunities. Sustainability (Switzerland), 12(15). https://doi.org/10.3390/su12156100
- Mudarris, Badrul, And Mohammad Syifaur Rizal. 2023. "Manajemen Strategi Kepemimpinan Kepala Sekolah Dalam Meningkatkan Kedisiplinan Guru Dan Karyawan Di SMA Nurul Jadid." JIIP-Jurnal Ilmiah Ilmu Pendidikan 6(12):10265-71.
- Olabi, A. G., Obaideen, K., Abdelkareem, M. A., AlMallahi, M. N., Shehata, N., Alami, A. H., Mdallal, A., Hassan, A. A. M., & Sayed, E. T. (2023). Wind Energy Contribution to the Sustainable Development Goals: Case Study on London Array. Sustainability (Switzerland), 15(5). https://doi.org/10.3390/su15054641
- Palmquist, A., Alves, J., Baranyi, R., Munkvold, R., & Oliveira, E. V. A. (2024). Blended Realities Higher Education Student Reflections on Acquiring Skills for Game Creation in a Project-Based- and Blended Learning Environments. https://doi.org/10.1145/3704414
- Pardo-Garcia, C., & Barac, M. (2020). Promoting employability in higher education: A case study on boosting entrepreneurship skills. Sustainability (Switzerland), 12(10), 1–23. https://doi.org/10.3390/SU12104004

- Poláková, M., Suleimanová, J. H., Madzík, P., Copuš, L., Molnárová, I., & Polednová, J. (2023). Soft skills and their importance in the labour market under the conditions of Industry 5.0. Heliyon, 9(8). https://doi.org/10.1016/j.heliyon.2023.e18670
- Postelnicu, C., & Câlea, S. (2019). The fourth industrial revolution. Global risks, local challenges for employment. Montenegrin Journal of Economics, 15(2), 195–206. https://doi.org/10.14254/1800-5845/2019.15-2.15
- Putra, A. S., Novitasari, D., Asbari, M., Purwanto, A., Iskandar, J., Hutagalung, D., o, S., & Cahyono, Y. (2020). Examine Relationship of Soft Skills, Hard Skills, Innovation and Performance: the Mediation Effect of Organizational Learning. International Journal of Science and Management Studies (IJSMS), June, 27–43. https://doi.org/10.51386/25815946/ijsms-v3i3p104
- Raco, J. R., Raton, Y. C., Krejci, J. V., Ohoitimur, J., Soputan, J., Tumewu, T. W., Korompis, M. J., Taroreh, F. J. H., Rachmadi, R. A., & Ngenget, S. (2022). Soft Skills of Higher Education in Industry 4.0 Era Using Buckley'S Fuzzy-Ahp. International Journal of the Analytic Hierarchy Process, 14(1), 1–37. https://doi.org/10.13033/IJAHP.V14I1.943
- Ragusa, A., Caggiano, V., Trigueros Ramos, R., González-Bernal, J. J., Gentil-Gutiérrez, A., Bastos, S. A. M. C., González-Santos, J., & Santamaría-Peláez, M. (2022). High Education and University Teaching and Learning Processes: Soft Skills. International Journal of Environmental Research and Public Health, 19(17). https://doi.org/10.3390/ijerph191710699
- Rizal, Mohammad Syifaur. 2024. "Educational Evolution: Sustainable Beturnment With Country In The Development Of The Trainer." Pp. 28–36 In Proceeding Of International Conference On Education, Society And Humanity. Vol. 2
- Setiawan Wibowo, T., Qonita Badi, A., Asna Annisa, A., Khaidir Abdul Wahab, M., Rifa Jamaludin, M., Rozikan, M., Mufid, A., Fahmi, K., & Purwanto, A. (2020). Effect of Hard Skills, Soft Skills, Organizational Learning and Innovation Capability on Islamic University Lecturers' Performance. Systematic Reviews in Pharmacy, 11(7), 556–569.
- Shenoy, P., & Kumar, T. (2024). ScienceDirect A Platform for Model-based Learning and Gamification in Design Education. Procedia CIRP, 128, 7–12. https://doi.org/10.1016/j.procir.2024.06.003
- Дирюгина, Е. Г., & Ясвин, В. А. (2024). Environmental Factors of Developing Critical Thinking Skills of Primary School Students. Вестник Мгпу. Серия Педагогика И Психология, 18(1–1), 788–803. https://doi.org/10.25688/2076-9121.2024.18.1-1.03