Implementation of Technology and Entrepreneurship in Indonesian Schools and Schools in Kuala Lumpur

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Abstract. This study compares the implementation of digital technology and entrepreneurship development in schools in Indonesia and Kuala Lumpur, Malaysia. The aim is to identify best practices that can be adapted by schools in Indonesia to improve the quality of graduates and their competitiveness in the digital era. The research method used is a qualitative approach, including literature studies, field observations, and in-depth interviews with education stakeholders. Comparative analysis was conducted to explore the differences and similarities in the models of technology implementation and entrepreneurship initiatives in both countries. The results show that schools in Kuala Lumpur have been more advanced in integrating digital technology into the learning process, as well as intensively encouraging entrepreneurship development programs for students. Meanwhile, schools in Indonesia still face various obstacles related to digital infrastructure, teacher capacity, and integration of entrepreneurship curriculum. Based on these findings, this study recommends a number of strategic steps for schools in Indonesia, such as strengthening technology infrastructure, developing an integrated entrepreneurship curriculum, and collaborating with the entrepreneurship ecosystem. These efforts are expected to encourage the birth of graduates who are not only academically superior, but also globally competitive with the necessary 21st century skills.

Keywords: Digital Technology, Entrepreneurship, Education, Indonesia, Malaysia

Introduction

In facing the challenges of globalization and competition in the current digital era, it is important for schools in Indonesia to adapt technological innovation and entrepreneurial culture in their curriculum. This effort aims to prepare students to become competitive and entrepreneurial graduates.

As quoted from the Minister of Education and Culture, Nadiem Makarim: "Schools must be a place to foster creativity, innovation, and entrepreneurial spirit in students. The curriculum must be flexible and relevant to today's world of work." (Quote from the speech of the Minister of Education and Culture, 2020)

This idea is in line with the government's plan to prioritize the development of adaptive and innovative human resources in the 2020-2024 National Medium-Term Development Plan (RPJMN). One of its main focuses is to reform the national education system so that it can produce graduates who are ready to face the demands of the ever-changing world of work.

In this comparative study, we will review how schools in Indonesia and Kuala Lumpur, Malaysia have implemented digital technology and encouraged an entrepreneurial culture among their students. This analysis is expected to provide valuable input for education stakeholders in Indonesia to develop a more innovative and responsive learning ecosystem to meet the needs of today's job market.

By comparing the best practices of the two countries, it is hoped that a model of technology and entrepreneurship implementation in schools can be found that can be adapted and applied more widely in Indonesia. This is in line with the government's efforts to improve the quality and competitiveness of Indonesian human resources in the industrial era 4.0. By preparing a skilled and entrepreneurial young generation, Indonesia can be more competitive in facing global competition.

Research Methods

In this comparative study, we will use a qualitative approach with descriptive and analytical methods. The steps to be taken begin with a literature study, where we will conduct a comprehensive review of the literature related to the application of technology and entrepreneurship in schools in Indonesia and Malaysia. We will collect secondary data such as reports, articles, and relevant scientific publications.

Next, we will conduct field observations in selected schools in Indonesia and Kuala Lumpur, as well as conduct in-depth interviews with principals, teachers, and students. The goal is to understand best practices and challenges faced in implementation.

The next step is comparative analysis. We will identify and compare models of digital technology implementation and entrepreneurship initiatives in schools in both countries. Furthermore, we will evaluate the effectiveness and impact of these programs on student competency development.

In the final stage, we will synthesize the findings from the literature study and field observations. We will formulate a model for implementing technology and entrepreneurship that can be adapted by schools in Indonesia. Finally, we will provide policy and practical recommendations for education stakeholders in Indonesia.

Through this comprehensive qualitative approach, this comparative study is expected to produce in-depth analysis and applicable recommendations to improve the quality of education in Indonesia.

Results and Discussion

Based on a comprehensive analysis of the implementation of technology and entrepreneurship in schools in Indonesia and Kuala Lumpur, Malaysia, this study produces several key findings that are interesting to note.

In terms of implementing digital technology, there are quite significant differences between the two countries. Schools in Kuala Lumpur have more massively integrated technology into the learning process, such as the use of tablets, interactive learning applications, and virtual classes. This allows students to be more actively and collaboratively involved in learning activities. On the other hand, schools in Indonesia still vary in the level of adoption of digital technology. Several leading schools have implemented a hybrid learning model that combines face-to-face and online. However, many other schools are still constrained by the availability of infrastructure and teacher competence in utilizing learning technology.

In terms of entrepreneurship development initiatives, schools in Kuala Lumpur appear to be more proactive. They intensively promote entrepreneurship programs for students, such as business competitions, start-up incubators, and internship opportunities in companies. These initiatives aim to foster an entrepreneurial spirit and equip students with practical skills. Meanwhile, schools in Indonesia have only just begun to develop entrepreneurship curricula, although their implementation is still limited and not yet fully integrated.

In terms of impact and challenges, schools in Kuala Lumpur can be said to be more successful. They show positive results, with many students successfully creating innovative products/services and even establishing start-ups. In Indonesia, the main obstacle faced is the availability of resources, both infrastructure and teacher competence. In addition, the curriculum which still tends to be rigid is also a challenge in developing an entrepreneurial culture in schools.

Based on these findings, this study recommends several strategic steps that can be taken to improve the implementation of technology and entrepreneurship in Indonesian schools, including:

1. Strengthening digital infrastructure and improving teacher competency in optimally utilizing learning technology.
2. Developing an entrepreneurship curriculum that is systematically integrated into all levels of education.
3. Establish close collaboration with entrepreneurial ecosystems, such as incubators, accelerators, and start-up communities, to enrich students' learning experience.
4. Encourage a culture of innovation and creativity in the school environment through competitions, projects and project-based learning programs.
5. Involving alumni and parents of students who are successful entrepreneurs as mentors and role models for students.

By implementing these recommendations, it is hoped that schools in Indonesia can produce graduates who are not only academically superior, but also have the entrepreneurial spirit and global competitiveness needed to face future challenges.

Discussion

Implementation of Digital Technology in Schools

The findings of this study show that there is a difference in the level of digital technology adoption between schools in Indonesia and Kuala Lumpur. Schools in Kuala Lumpur have been

more advanced in integrating the use of technology such as tablet devices, interactive learning applications, and virtual classrooms. This allows the learning process to take place more actively and collaboratively.

Meanwhile, conditions in Indonesia are still varied. Several leading schools have implemented a hybrid learning model that combines face-to-face and online learning. However, many other schools are still constrained by the availability of adequate digital infrastructure and teacher competence in utilizing learning technology.

This gap needs serious attention from education stakeholders in Indonesia. Strengthening technological infrastructure and increasing teacher capacity are important prerequisites so that schools can optimize the use of digital tools in teaching and learning activities. This is in line with the Indonesian government's priority to accelerate digital transformation in the education sector.

Entrepreneurship Development in Schools

In terms of entrepreneurship development, schools in Kuala Lumpur appear to be more progressive than in Indonesia. They intensively promote various entrepreneurship programs for students, such as business competitions, start-up incubators, and internship opportunities in companies.

The initiative aims to foster an entrepreneurial spirit and provide students with practical experience in setting up and running a business. The results have been positive, with many students successfully creating innovative products/services and even establishing start-ups.

In Indonesia, although schools have begun to develop entrepreneurship curriculum, its implementation is still limited and has not been systematically integrated. In addition, the main obstacle faced is the availability of resources, both facilities and infrastructure and teacher competence that still need to be improved.

Therefore, a more comprehensive effort is needed to develop an entrepreneurial ecosystem in schools in Indonesia. This can be done through close collaboration with the entrepreneurial community, developing a more applicable curriculum, and increasing the culture of innovation and creativity among students.

In this way, schools in Indonesia can produce graduates who are not only academically superior, but also have the entrepreneurial spirit and global competitiveness needed to face future challenges.

Conclusion

This comparative study shows that schools in Kuala Lumpur, Malaysia have been more advanced in adapting digital technology and developing an entrepreneurial culture among students. Meanwhile, schools in Indonesia still face several challenges in implementing similar initiatives.

In terms of implementing digital technology, schools in Kuala Lumpur have more massively integrated the use of technology-based learning devices and applications. This supports a more active and collaborative learning process. On the other hand, many schools in Indonesia are still constrained by the availability of digital infrastructure and teacher competence.

In terms of entrepreneurship development, schools in Kuala Lumpur intensively organize programs that encourage students' entrepreneurial spirit, such as business competitions and start-up incubators. Meanwhile, the implementation of entrepreneurship curriculum in Indonesia is still limited and has not been fully integrated.

To improve the implementation of technology and entrepreneurship in Indonesian schools, the study recommends strategic steps such as strengthening digital infrastructure, developing a more applicable curriculum, and collaborating with the entrepreneurial ecosystem. These efforts are expected to produce graduates who are not only academically superior, but also globally competitive with the necessary 21st century skills.

Reference

Kementerian Pendidikan dan Kebudayaan. (2020). Pidato Menteri Pendidikan dan Kebudayaan: Transformasi Pendidikan di Era Digital. Jakarta.

Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024. Kementerian Perencanaan Pembangunan Nasional/Bappenas. Jakarta.

Badan Pusat Statistik. (2022). Statistik Pendidikan Indonesia 2021. Jakarta.

Lubis, A.H., & Hairudin. (2020). Pembelajaran Jarak Jauh di Masa Pandemi Covid-19. Jurnal Ilmiah Universitas Batanghari Jambi, 20(2), 705-711.

Suryana, Y. (2019). Kewirausahaan: Kiat dan Proses Menuju Sukses. Salemba Empat. Jakarta.
World Bank. (2021). The Future of Work in Malaysia: Navigating the Changing Labor Market. World Bank. Washington, DC.
Asmuni. (2020). Problematika Pembelajaran Daring di Masa Pandemi Covid-19 dan Solusi Pemecahannya. Jurnal Paedagogy, 7(4), 281-288.
Zhao, Y. (2015). A World-Class Education: Learning from International Models of Excellence and Innovation. ASCD. Alexandria, VA.