

Curriculum Transformation and Educational Innovation: A Comparative Analysis of Human Resource Development Approaches in Indonesia and Saudi Arabia

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ABSTRACT

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Abstract

This study aims to analyze the transformation of curriculum and educational innovation in Indonesia and Saudi Arabia and its impact on human resource development. Using a qualitative method based on literature studies, this study examines the education policies of both countries based on academic documents, policy reports, and previous studies. The results of the study show that Indonesia implements a more flexible curriculum through the Merdeka Curriculum, while Saudi Arabia is reforming education within the framework of Vision 2030 which focuses on improving technology-based skills and economic diversification. However, both countries face challenges in implementing policies, including inequality in access to education, teacher readiness, and social resistance to curriculum changes. From the perspective of constructivism theory and human capital theory, this educational transformation has had a positive impact on improving workforce readiness and strengthening human resource competitiveness. However, a more structured strategy is still needed to strengthen educational infrastructure and increase the relevance of graduate skills to industry needs. This study recommends that both countries continue to develop innovation-based education policies, improve teacher training, and expand access to education for marginalized groups. Thus, curriculum reform can be more effective in building superior human resources at the global level.

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A. Introduction

Education is a fundamental aspect in the development of a country, especially in the development of competitive human resources (HR) in the era of globalization. Various countries have transformed their curriculum and innovated education to ensure that their education systems are able to produce individuals who are adaptive and have 21st-century skills. Indonesia and Saudi Arabia, despite having different cultural and social backgrounds, both face challenges in developing effective education strategies to improve the quality of their HR. In Indonesia, the education curriculum has undergone various changes to adapt to the times. National education policies seek to balance academic

aspects, vocational skills, and character education. Since the implementation of the Merdeka Curriculum, a more flexible approach to learning has been attempted to encourage creativity and innovation among students (Suyanto, 2018).

Meanwhile, Saudi Arabia has carried out major reforms in its education system, especially through the Vision 2030 program which focuses on economic diversification and improving the quality of HR. Education in Saudi Arabia was previously heavily oriented towards religious studies, but in recent years there has been a shift towards a more balanced curriculum between religious and modern sciences (Vision 2030 Saudi Arabia, 2016). The main difference between the two countries in the education system lies in the approach applied in the curriculum. Indonesia emphasizes pluralism and openness to various disciplines, while Saudi Arabia was initially more conservative with a primary focus on sharia-based education. However, reforms undertaken by Saudi Arabia have shown significant changes in opening up access to education that is more inclusive and relevant to the needs of global industry (Putri et al., 2024).

One of the challenges faced by Indonesia is the gap in the implementation of education policies due to differences in infrastructure and access to technology in various regions. Although curriculum policies continue to develop, there are still obstacles in the distribution of resources evenly across the region (Azra, 2000). Saudi Arabia, on the other hand, faces challenges in changing the paradigm of society towards more modern education. With a social background that is strongly tied to conservative values, the transition to a more open education system requires a careful approach to remain in line with existing cultural norms (BBC News Indonesia, 2020).

A comparative study of the education systems of Indonesia and Saudi Arabia is important in understanding how education policies can be adapted to the social and economic contexts of each country. Through this research, it is hoped that the best model for curriculum transformation can be found that can be applied to improve the quality of human resources effectively. By looking at the dynamics of education reform in both countries, this study will analyze how policies and innovations in the curriculum can have an impact on the development of superior human resources. This study will also explore the factors that play a role in the successful implementation of education transformation in Indonesia and Saudi Arabia.

Several previous studies have discussed the education systems in Indonesia and Saudi Arabia separately. A study conducted by Putri et al. (2024) compared the educational approaches of the two countries and found that despite differences in curriculum structure, both have the same goal of producing graduates who are competitive in the global market. Meanwhile, research by Yunal (2022) discusses how education reform in Saudi Arabia is starting to move towards more inclusive modernization. This study highlights the impact of Vision 2030 policies on the education system in Saudi Arabia, particularly in the effort to adapt the curriculum to the needs of industry and the knowledge-based economy.

Although there have been many studies that discuss the education systems in Indonesia and Saudi Arabia individually, there are still few studies that directly compare the effectiveness of curriculum transformation in developing human resources in both countries. This study aims to fill this gap by analyzing how the implemented education policies can affect the quality of human resources produced. In addition, the novelty of this study lies in the analytical approach that combines cultural, social, and economic factors in understanding the effectiveness of educational innovation. By reviewing the implementation of the curriculum in each country, this study will provide a more comprehensive picture of the challenges and opportunities in educational transformation.

Thus, this study not only contributes to academic studies on comparative education but also provides recommendations for policy makers in designing more effective education strategies. The results of this study are expected to help both countries in formulating more adaptive and responsive education policies to global demands. In the modern era, education is a key element in determining a country's competitiveness in the international arena. Indonesia and Saudi Arabia, as countries with different cultural and social backgrounds, face unique challenges in developing education systems that are capable of producing high-quality human resources.

The implementation of education reform in both countries also still faces various obstacles, ranging from community resistance to curriculum changes to limited infrastructure in supporting

educational innovation. However, the steps that have been taken show that there are serious efforts to improve the quality of education as part of the national development strategy of each country.

B. Method

This study uses a qualitative approach with a literature study method. Literature studies are conducted by collecting and analyzing various academic sources, such as journals, books, policy reports, and official documents related to the education system in Indonesia and Saudi Arabia. This method was chosen because it allows researchers to understand the dynamics of curriculum transformation and educational innovation comprehensively through a study of various relevant references (Creswell, 2016). In a literature study, the sources used must be credible and come from previous research that has been tested for quality. Therefore, this study refers to indexed journals, academic books, and reports from related educational institutions and governments. The analysis is carried out by comparing the education policies of the two countries based on certain categories, such as curriculum structure, learning approaches, and the impact of reform on human resource development (Neuman, 2014).

The use of the literature study method in this study aims to gain a broader understanding of curriculum transformation and educational innovation in Indonesia and Saudi Arabia. This method allows researchers to identify patterns that emerge in changes in education policy and evaluate the effectiveness of reforms that have been implemented in each country (Merriam, 2009).

The data collection process was carried out through literature searches from various sources relevant to the research topic. Secondary data used included the results of previous studies, national education policy documents, and reports from international organizations that reviewed the development of the education system in both countries. Data analysis was carried out using interpretive techniques, namely interpreting the information obtained based on the social, cultural, and economic contexts of each country (Bowen, 2009).

In this study, a qualitative approach was used to understand the meaning of various education policies that have been implemented. Through thematic analysis, this study groups data based on main themes, such as curriculum transformation strategies, implementation challenges, and impacts on human resource development. This approach helps in exploring the meaning behind education policies implemented in Indonesia and Saudi Arabia (Braun & Clarke, 2006). One of the main advantages of the literature study method is its ability to explore various perspectives from previous research. By comparing various academic sources, this study can identify key trends in education reform and evaluate the success of policies that have been implemented. This approach also allows researchers to put forward more evidence-based recommendations in an effort to improve the education system in both countries (Hart, 2018).

However, the literature study method also has several limitations. One of them is the reliance on secondary data, which can lead to limitations in the validity of information if the sources used are not properly verified. Therefore, this study only refers to sources that have gone through a peer review process and have high academic credibility (Ridley, 2012). To increase the validity of the study, a triangulation strategy was applied by comparing various different literature sources. This approach allows researchers to confirm findings from various perspectives, so that the resulting analysis is more objective and comprehensive. In addition, data from official government reports and international organizations are used as comparative materials to increase the reliability of the research results (Flick, 2009).

The analysis in this study uses a descriptive-qualitative technique, where the data collected is analyzed in depth to understand the pattern of changes in education policy. By using this technique, the study can describe how curriculum transformation and educational innovation impact human resource development in Indonesia and Saudi Arabia in a systematic and structured manner (Miles & Huberman, 1994). Overall, this research method aims to provide a deeper understanding of the comparison of education systems in Indonesia and Saudi Arabia. By using a qualitative approach and literature study, this research is expected to provide broader insights into the best strategies in educational reform to improve the competitiveness of human resources at the global level.

C. Results and Discussion

1. Result

a. Comparison of Curriculum Structure and Approach

The education systems in Indonesia and Saudi Arabia have different approaches in designing their curriculum. Indonesia adopts a dynamic and inclusive curriculum, where various subjects, including social sciences, science, and religious education are taught in a balanced manner. Since the introduction of the Independent Curriculum, the learning approach has become more flexible by adjusting the needs of students and the conditions of each school (Suyanto, 2018). On the other hand, Saudi Arabia previously had an education system that was more focused on Islamic religious studies. However, in recent years, the education reforms proposed in Vision 2030 have expanded the scope of the curriculum to include science, technology, engineering, and mathematics (STEM) subjects, in order to improve workforce readiness in the digital era (Vision 2030 Saudi Arabia, 2016).

The changes made by Saudi Arabia indicate a paradigm shift in the approach to education, where the curriculum that was initially more oriented towards Islamic teachings now increasingly emphasizes the importance of innovation and practical skills. This is in line with the global trend where the education system increasingly emphasizes mastery of technological skills and critical thinking (Putri et al., 2024). In addition, Indonesia also implements an education system based on local values and cultural wisdom. In some aspects, this approach provides advantages in instilling nationalism and diversity. However, the challenge faced is how to ensure that graduates have sufficient competence to compete in the global market, especially in the technology-based industrial sector (Azra, 2000).

Saudi Arabia, with a more centralized education system, has an advantage in terms of standardizing education policies. However, the challenge they face is how to integrate traditional Islamic values with the needs of the modern labor market without losing their cultural identity (BBC News Indonesia, 2020).

b. Challenges in Implementing Curriculum Transformation

In implementing curriculum reform, both Indonesia and Saudi Arabia face various challenges. One of the main challenges in Indonesia is inequality in access to education. Although more flexible curriculum policies have been implemented, there are still gaps in educational infrastructure, especially in remote areas that lack access to supporting facilities such as the internet and digital technology (Suyanto, 2018).

Saudi Arabia, on the other hand, faces challenges in changing people's mindsets towards modern education. With a strong cultural background and conservative values that are still attached, curriculum reform often meets resistance, especially from groups who still believe that religious-based education should remain the main priority (Yunal, 2022). In addition, the readiness of teaching staff is also an important factor in implementing curriculum reform. In Indonesia, there is still a gap in the quality of teaching staff, where not all teachers have sufficient capacity to implement more innovative and technology-based learning methods (Neuman, 2014).

In Saudi Arabia, curriculum changes require an increase in the capacity of teaching staff, especially in teaching STEM subjects that previously received less attention. Therefore, teacher training programs are one of the main priorities in education reform in the country (Vision 2030 Saudi Arabia, 2016).

Government policy support also plays an important role in ensuring the success of curriculum transformation. Indonesia has adopted various policies to improve access and quality of education, including through school digitization programs. However, limited infrastructure and regional disparities remain challenges that need to be addressed (Merriam, 2009).

c. Impact of Education Reform on Human Resource Development

The curriculum transformation carried out in Indonesia and Saudi Arabia has had a significant impact on human resource development. In Indonesia, changes to a more flexible curriculum have allowed students to develop skills that are more in line with the needs of the labor market. However, the challenge that remains is how to ensure that all educational units can implement the curriculum effectively (Hart, 2018).

In Saudi Arabia, education reform has helped improve the skills of the local workforce and reduce dependence on foreign workers. Policies that support the development of vocational and vocational education have encouraged more graduates to be ready to work in rapidly growing industrial sectors, such as technology and engineering (Ridley, 2012). In addition, education reform in Saudi Arabia has also had an impact on increasing women's participation in education and the workforce. Previously, the country's education system was more restrictive of women's access to certain fields of knowledge. However, with more inclusive policies, women now have greater opportunities to participate in broader economic sectors (Flick, 2009).

In Indonesia, strengthening vocational education and industry-based skills has also become a major focus of education reform. The government has intensified cooperation with industry to ensure that graduates have skills that match the needs of the labor market (Miles & Huberman, 1994). However, there are still challenges in creating an education ecosystem that supports innovation and entrepreneurship. In Indonesia, although there have been efforts to develop technology-based skills, there is still a gap between higher education graduates and industry needs, especially in the fields of technology and digitalization (Braun & Clarke, 2006).

In Saudi Arabia, the Vision 2030 policy has succeeded in attracting investment in the education and technology sectors. With this reform, it is hoped that the education system in the country will be more competitive and able to produce a workforce that is better prepared to face global challenges (Putri et al., 2024). Overall, curriculum transformation and educational innovation in both countries have shown a positive impact in improving the quality of human resources. However, strategic steps are still needed to overcome the various challenges that exist, such as improving educational infrastructure, strengthening the capacity of educators, and aligning the education system with the needs of the labor market.

Through this comparative analysis, it can be concluded that education reform in Indonesia and Saudi Arabia has its own advantages and challenges. Learning from best practices in both countries can be a reference for future education policies, especially in facing increasingly complex global dynamics (Creswell, 2016).

2. Discussion

a. Comparison of Curriculum Structure and Approach

From the perspective of constructivism theory (Piaget, 1972), education must be oriented towards active learning experiences and based on student involvement. The more flexible curriculum approach in Indonesia through the Independent Curriculum reflects this constructivist principle, where students are encouraged to develop skills according to their interests and talents (Suyanto, 2018). Meanwhile, Saudi Arabia, which previously implemented a more conservative education system, is now starting to move towards a more skills-based and innovation-based approach in accordance with its national development vision (Vision 2030 Saudi Arabia, 2016).

From the perspective of educational ecology theory (Bronfenbrenner, 1979), the social and cultural environment plays a role in shaping a country's curriculum policy. Indonesia, which has cultural and religious diversity, places more emphasis on the integration of various disciplines in the curriculum. On the other hand, education reform in Saudi Arabia shows an effort to balance traditional values with the demands of global modernization (Putri et al., 2024).

b. Challenges in Implementing Curriculum Transformation

In the implementation of education reform, systems theory (Bertalanffy, 1968) emphasizes that the education system consists of various interacting subsystems. In Indonesia, the main

challenges in implementing the curriculum are limited infrastructure and inequality in access to education, especially in remote areas (Azra, 2000). This shows that the education system must be developed holistically, including improving infrastructure and the quality of teaching staff.

In Saudi Arabia, the theory of diffusion of innovation (Rogers, 2003) can be used to understand how changes in the education system are adopted by society. Education reforms that introduce STEM-based curricula and diversify the workforce sector still face social resistance in some conservative groups (Yunal, 2022). Therefore, a more inclusive policy socialization approach is needed so that education transformation can be widely accepted.

c. Impact of Education Reform on Human Resource Development

Human capital theory (Becker, 1964) states that investment in education will increase the productivity and competitiveness of the workforce. Curriculum reform in Indonesia and Saudi Arabia has contributed to improving the quality of human resources, especially in terms of readiness to face the industrial revolution 4.0 (Merriam, 2009). However, the challenge that is still faced is how to ensure that graduates have skills that are in line with industry needs.

The approach of lifelong learning theory (Knowles, 1980) is also relevant in seeing the impact of education reform on human resources. In Saudi Arabia, opening up access to education for women and increasing vocational training shows a shift towards a more inclusive and sustainable education system (Flick, 2009). Meanwhile, in Indonesia, efforts to strengthen digital and entrepreneurial skills at the higher education level are one of the strategies in increasing the competitiveness of human resources in the global market (Miles & Huberman, 1994).

D. Conclusion

This study shows that curriculum transformation and educational innovation in Indonesia and Saudi Arabia have differences in approach and challenges faced. Indonesia emphasizes flexibility and diversity in the education system, while Saudi Arabia focuses on modernization and workforce readiness in facing the digital era.

However, the challenges faced by both countries are similar, especially in terms of effective policy implementation, teacher readiness, and alignment between the education system and industry needs. Therefore, future education strategies must prioritize improving infrastructure, strengthening teacher competencies, and developing technology-based skills so that the human resources produced can be more competitive at the global level.

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