A Review of Key Factors for Educational Reform in Malaysian Rural Schools

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ABSTRACT

Despite numerous constraints confronting education in rural contexts, it remains sidelined from the reform agenda in many developing countries. School-aged children in rural settings are more disadvantaged in terms of financial conditions, learning environment, and governmental support compared to their urban counterparts. Situated in the Malaysian educational context, this review aims to identify the key drivers for educational reforms in rural localities. A comprehensive overview of the local socio-economic landscape following the Covid-19 pandemic, based on contemporary literature and official documents, shows that its aftermath has worsened pre-existing inequality of educational access and marginalized vulnerable groups. Learning disruption and limited governmental oversight also impeded rural and indigenous students' academic performance and overall progress. The review also points out major deterrents impacting Malaysian rural education, including teachers' and students' physical and psychological unwillingness to implement technologically-mediated approaches and the availability of ICT resources in rural schools. The paper concludes with some recommendations for stakeholders, reiterating the need for more flexibility in learning platforms, innovative teaching methods, and further promotion of educational inclusivity.

Keywords: Educational reform, Malaysian education, Rural schools, Rural-urban disparity, Rural constraints

INTRODUCTION

Education is crucial for the development of a nation. However, inequality in the family socioeconomic status has brought about inequality in education. This is particularly obvious during the COVID-19 pandemic in Malaysia, where B40 households from rural areas had problems coping with their learning. Reports showed that B40 households struggled to provide necessities for their homes and could not afford to provide each school-going child with a technological device. Most had to share mobile phones with their siblings, and sometimes classes were disrupted due to limited mobile data (Department of Statistics Malaysia, 2020). Household Income and Basic Survey Amenities Report 2019 reported that B40 constitutes 2.91 million households, or 16 percent of the nation, with income below RM4851 (A. Yunus & Yusof, 2021). The New Straits Times (2021) reported that 20 percent of the M40 households, or 580,000, were categorized as B40 due to the economic downturn caused by the COVID-19 pandemic.

In lieu of this, it would be interesting to consider key factors that influence education for reform, especially in rural schools in Malaysia. This paper uses the educational equity framework, emphasizing both distributive

fairness (equal allocation of resources) and procedural fairness (equal education processes), and Sen's Capability Approach, which stresses that true equity lies in what learners are able to do and achieve. This framework would provide a foundation for analyzing rural education challenges and recommending actionable policy reforms.

THEORETICAL AND CONCEPTUAL FRAMEWORK

Equity Theory

The Equity Theory was first developed by Adams (1965), emphasizing that fairness and balance are core to motivation and satisfaction in learning. Applied to education, the theory suggests that students evaluate their educational experience by comparing their input with the outcomes they receive. When students perceive inequities such as limited resources in rural schools compared to urban schools, they get demotivated, disengaged, or feel disadvantaged. This perspective helps explain why rural schools in Malaysia require better facilities, trained teachers, and equal opportunities. Similarly, neighboring countries in Southeast Asia also face similar challenges (Asadullah et al., 2025; Yarrow et al., 2024). Therefore, anchoring reform efforts in equity theory allows policymakers to better understand inequality.

Capability Approach

The Capability Approach was introduced by Amartya Sen (1999). It was expanded by Nussbaum (2000), providing a broader normative framework for evaluating educational reform. Rather than focusing solely on inputs and outputs, the approach emphasized individuals' real freedoms and opportunities to achieve valued outcomes. In the context of rural education, this means more than just providing resources but also expanding students' capabilities to meaningful learning. In other words, technology integration in classrooms should not simply be measured by access to devices but by whether it enables students to engage critically, collaborate effectively, and bridge gaps with their urban peers. This is important to note as digital divides remain among rural students who risk exclusion from meaningful participation in a knowledge-based economy.

Relevance to the Study

By combining Equity Theory with the Capability Approach, this study frames students' perceptions of educational reform as a matter of equity and opportunity. The frameworks highlight the dual challenges faced by rural students in Malaysia, namely, the unequal distribution of resources and the limited expansion of meaningful learning opportunities.

Defining Rural Schools

The concept of rural schools has had different interpretations by different researchers. Herzog and Pittman (1995) defined it as a location not part of the city. Johnson and Strange (2005) defined a rural school as a school located outside the metropolitan area with less than 2500 people.

In defining the quality of rural schools, Marwan, Sumintono, and Mislan (2012) state that a rural school should only employ high-quality teachers with qualified certification. Besides that, teachers working in rural schools should be paid an adequate salary to motivate them to teach in these areas. Subsequently, a quality rural school should be led by a capable leader. Effective leaders are the ones who can provide strong support to the school community. In addition, the school should also be equipped with facilities such as a library and teaching and learning resources. Technology is a factor to be accounted for in rural schools. The pandemic has provided a clear picture of how the future of teaching and learning depends more and more on technology (United Nations,2020).

Pandemic and Post-Pandemic Education Scenario: The Necessity of an Education Reform in Malaysia

During the pandemic, the widening gap between children who can cope with online lessons and those who cannot

cope threatened the socioeconomic landscape. As such, it is important to study and review the current status of education after almost two years of school closure in Malaysia and to face the realities of how it has affected children's learning development and what practical ways or factors need to be considered for advancement in the education system.

Towards the end of 2021, the government announced the reopening of schools to avoid further learning loss, mental distress, or reduced development of social skills among students. However, reports have shown mixed responses (A. Povera & Arumugam, 2021). Although some undergraduates have claimed to benefit from online learning, there were mixed feelings, and the learning experience was found to be more challenging than initially expected (Mustapha, Siti & Devarajoo, 2020). While the National Science, Technology, Engineering, and Mathematics Movement chairman has appealed to reconsider the reopening of schools in relation to the National Recovery Plan (NRP), Parent Action Group for Education president Datin Noor Azimah Abdul Rahim stated that Malaysia had the longest school closure record and urged for the reopening of schools as soon as possible. On the other hand, UKM education expert Dr Anuar Ahmad suggested applying a rotation method where pupils rotate attending school (A. Povera & Arumugam, 2021). The Malay Mail (2008), however, reported that the reopening of schools on January 10, 2022, received excitement from students and relief from parents.

On March 18, 2020, the Malaysian government instructed all educational institutions to be closed National Security Council, 2020). Similarly, most schools across the globe have discontinued in-school teaching and learning to break the spread of the virus and have conducted online learning (Dhawan, 2020). Reimers and Schleicher (2020) and UNESCO (2020) claimed that online teaching and learning were the best mechanisms during the unprecedented lockdown to ensure that education could continue despite the pandemic. According to the United Nations report (2020), this affected 1.58 billion students worldwide in over 200 countries. The report further states that this would potentially threaten vulnerable groups who cannot afford proper technology infrastructure and have an unconducive home environment for learning. Further implications include teachers and students adapting to new situations with all activities and learning dependent on online tools (Zhou, Wu, Zhou, & Li, 2020).

In Malaysia, the lockdown disproportionated students, especially non-citizen families, with employment, food, and housing insecurities that were compounded by pre-existing inequalities. Vulnerable groups like this could not participate in online learning due to a lack of digital devices, internet connectivity, parent support, and proper home learning environments. Lack of government oversight for inclusive educational policies was among the issues to ensure that no child is left behind. In a study by Nordin and Nordin (2020) on the impact of COVID-19 on education systems during the Movement Control Order (MCO), it was found that acceptance, usability, satisfaction, and technical skills are important for online learning in higher institutions, and further to this, it also requires significant investment in the staff, resources, energy, and space.

Astro Awani reported that there is clear evidence that students learned less during the lockdown (Zaki, 2021). One of the greatest losses is the rising illiteracy among Primary 1 and 2 students who could not keep up with online lessons. With school closures, students in rural areas have been left further behind than their peers in urban schools. There was a higher rate of absenteeism from online classes in secondary schools. Psychologically, the report further states that students have suffered negatively regarding social skills. The report concluded that the way forward would be for government stakeholders to engage with teachers, parents, and communities to tailor to the needs of different groups.

UNICEF (2020) reported that during the lockdown in Malaysia, the urban poor, the remote indigenous communities, as well as migrant and refugee communities were severely affected due to disparities in their socioeconomic status. In the report, B40 families were severely affected, with one in four heads of households living in low-cost flats being unemployed (25 percent). The report further states that in rural and indigenous areas, the disruption of education had further setbacks as many remote villages do not have internet or phone lines for online classes, resulting in many indigenous children having no formal education and falling behind in their schoolwork. Recommendations for immediate and long-term recovery include planning, budgeting, and

prioritizing mental health support and pre-crisis planning, as ad-hoc decisions may lead to unexpected negative consequences.

However, Malaysia's experience is not unique as neighboring countries face similar challenges. In Vietnam, for example, notable progress has been made by investing in teacher training and competency-based curricula, resulting in better-than-expected performance in PISA (Nguyen et al., 2025). Indonesia and the Philippines also faced prolonged closures, but Indonesia's national digital platforms and the Philippines' community learning hubs helped mitigate learning loss (Kencana & Meisyanti, 2020; Perez, 2021). Compared with these systems, Malaysia's school closures and uneven digital infrastructure underscore the need for policies that combine technology access with localized, community-based support.

Key Factors for Educational Reform in Rural Schools

There is limited research related to rural schools in Malaysia. In general, however, several studies have identified challenges rural schools face. White et al. (2008) found that a factor prevailing in rural schools in Australia is teacher shortage problems, which may have caused a decrease in the quality of rural education. Other factors that call for a change in the education system include a lack of teacher development programs the remoteness of rural schools. work overload, and poor salaries (Hudson & Hudson, 2008). A report from Arnold (2004) further pointed out that a common problem in rural schools is the lack of quality school administrators.

Most research in Malaysian rural schools is related to English language teaching and achievement in Science and Mathematics. Zakaria et al. (2024) studied personalized learning in Malaysian rural and low-enrolment schools to teach English. The study found that teachers were reluctant to adopt personalized learning approaches, denying students the vital benefits of education for their future success and development. In another study, it was found that the main challenges of implementing ICT in ESL rural primary classrooms are both physical and psychological. Students and teachers were not physically and mentally ready to accept technology (Dunstan & Ismail, 2024). Shanti (2019) studied rural schools involving teachers and students and found that students became less shy and increased questioning through cooperative learning, and teachers also had similar outcomes. Martin (2005) investigated two rural schools in Sarawak, Malaysia's interior. The unique situation in the rural schools was typical for other parts of Malaysia, where technology such as the internet and mobile phones can have a greater impact on language acquisition if they are exposed to the young generation of rural areas. In rural areas, however, internet access is not reliable.

Mathematics achievement in rural and urban schools has been found to have disparities according to the World Bank reports (2010). It was found that rural schools in Malaysia could not provide adequate education. The trends in the International Mathematics and Science Study (TIMSS) reported that Malaysian students' mathematics scores declined over time. This is attributed to the policy to use English as the medium of instruction for the teaching of Science and Mathematics. Due to this policy, it is found that rural primary school students performed less in Mathematics than their counterparts (Singh, Rahman & Hoon, 2010).

For equal education in this digital era, the disparity between urban and rural schools has to be addressed. Some key factors from the review of previous literature cited in this article include teacher willingness to teach in rural areas, remoteness of rural schools with a lack of internet access, lack of infrastructure, lack of quality administrators in rural schools, and lack of resources, particularly for English, Mathematics, and Science subjects (TVET).

CONCLUSION AND RECOMMENDATION

In conclusion, this paper has reviewed several key factors that play a pivotal role in educational reform in rural schools in Malaysia. The article highlights how the pandemic has shaped education systems worldwide and how this has also affected education among the different socioeconomic classes in Malaysia, where B40, M40, and T20 families coped with the education situation from home through online learning classes. Furthermore, the

unique challenges faced by rural schools require a holistic approach to ensure sustainable improvements in the education system. Issues in rural schools, therefore, need to be addressed, such as inadequate infrastructure, lack of resources, teacher shortage, and quality school administrators.

Since the reopening of schools, education has returned to the time before the pandemic. All students have returned to school. However, certain educational changes and experiences have developed due to the pandemic that cannot be denied. Hence, there is an obvious need for continued research and implementation of evidence-based strategies to address Malaysian rural schools' dynamic challenges. The findings of this review show a need for educational reform to address the inequality of education among the different financial statuses in the rural community. It also clearly defines the need for the use of technology to continue from the times of home-based online learning, and flexibility should be included for online home-based learning and offline school-based learning. Integrating technology and innovative teaching methods is recommended to enhance education quality and promote inclusivity.

The findings of this review ultimately contribute to continuous education reform discourses and will give policymakers, educators, and researchers valuable insights toward implementing effective education reform. This, in turn, would contribute to the nation's future, as well-educated citizens contribute to the nation's prosperity.

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