Address Educational Inequality: Current State, Causes, and Strategies

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Abstract. In contemporary society, the escalating issue of educational inequality is amplifying social stratification and giving rise to various associated problems. This study first investigates the current situation of educational inequality, and then delves into the origins and exacerbating factors contributing to educational inequality. Through an analysis of existing secondary data and a synthesis of conclusions from prior research on the relationship between socioeconomic inequality, social origin and education, intergenerational mobility of education, etc. Four primary factors contributing to or intensifying educational inequality are identified: family socioeconomic status (SES), societal structure and cultural influences, impediments within the educational system, and disruptive events such as the COVID-19 pandemic. In response to these identified factors, the study proposes three strategic measures: educational policy reforms by governments, innovative educational methods and digital resources in schools, and community-oriented resource centers in communities. The paper concludes with a discussion of both theoretical and practical implications stemming from these findings.

Keywords: Education, SES, inequality, intergenerational mobility.

1. Introduction

Education is crucial in shaping individuals and societies, fostering economic development, and promoting social mobility. Educational equity is an essential part of education. Educational equity does not require that all students achieve the same educational outcomes, but rather that students' outcomes are independent of their backgrounds or uncontrollable economic and social circumstances [1]. According to Lee & Lee, a more equal distribution of education contributes significantly to reducing income inequality. However, educational inequality persists globally, presenting a substantial challenge that demands social attention [2].

As societies become increasingly interconnected, the urgency of addressing educational disparities becomes more pronounced. This study focuses on bridging the gap between the lofty expectations of educational equality and the stark reality faced by many students, particularly those from marginalized backgrounds. By scrutinizing the existing inequalities, understanding their origins, and proposing actionable strategies, this research aims to catalyze a collective effort toward fostering equal educational opportunities for all.

The significance of this study lies in its profound implications for addressing the pervasive issue of educational inequality. As contemporary society stands at the intersection of societal progress and the imperative for inclusive development, understanding and mitigating the root causes of educational disparities is paramount.

On a broader societal level, the study underscores the urgency of collective action. Educational inequality is not merely an academic concern; it is a societal challenge that hinders progress and perpetuates social divides. By emphasizing the roles of governments, schools, and communities in the pursuit of educational equality, the study advocates for a collaborative approach. It calls upon stakeholders to recognize their shared responsibility and actively contribute to the realization of a more just and equitable educational landscape.

2. The Current Situation of Educational Inequality

Expectations for educational equality are high, yet the reality falls short. Disparities in access to quality education persist, disproportionately affecting marginalized communities. This section will examine the existing educational inequalities, the societal expectations for equal opportunities, and the urgent appeal for change.

As stated by Jiang & Ren, unequal educational opportunity accounts for between 6% and 11% of the variation in educational performance in the lower grades at the middle school level and between 8% and 22% in the upper grades [3]. As a result, there are highly significant differences in educational outcomes at the middle school level. Another piece of evidence is the conclusion from Blanden et al. that there are gaps in student achievement in math and reading [4]. This article also demonstrates the disparity in student attainment in tertiary education using longitudinal data from Australia, the UK, Germany, and the US.

In response, a substantial number of studies have explored the challenges of educational inequality and attempts have been made to alleviate it. According to Ling & Nasri, establishing a secure and welcoming environment for immigrant students, providing educators with the resources required to act, creating partnerships for students' achievement, and ensuring equal access to higher education are the four main challenges of equity in education [5].

On the report of Ainscow, there is evidence of an increased interest in making education more inclusive and equitable; however, confusion remains regarding the actions needed to advance policy and practice [6]. Another research conducted by Morrison et al. proposed three measures to address spatial inequities in education: narrowing the gap between educational facilities and resources to improve the accessibility and quality of education; increasing the versatility and flexibility of educational space to improve the participation and efficiency of education; respecting the plurality and diversity of educational space to improve the purpose and significance of education [7]. These studies demonstrate social attention and expectations for equal opportunities.

Furthermore, as claimed by Crouch et al. who researched a range of data from national and cross-national examinations, including time-series, aggregate, and micro (student-level) data, reduced percentages below low levels are primarily responsible for the reduction in inequality that accompanies improvements in average levels [8]. Specifically, nations progress from extremely low average academic achievement to medium levels more through decreasing the proportion of students with extremely low scores than through raising the proportion of high-achieving students. Therefore, raising the overall level of education is considered a solution to alleviating inequalities in education.

To summarize, the amalgamation of these studies and findings underscores the urgent need for comprehensive reforms to achieve educational equality. Acknowledging challenges, proposing solutions, and fostering inclusivity should be at the forefront of policy and practice to bridge the persistent gaps in educational opportunities.

3. Causes of Educational Inequality

Educational inequality arises from a variety of interconnected factors, each exerting its influence on the educational trajectory of individuals. This section carefully examines the various causes of educational disparities, utilizing a comprehensive approach that encompasses socioeconomic status (SES), the educational background of families, social structures, and cultural factors. Additionally, it explores obstacles within the educational system and the disruptive impact of events such as COVID-19 and other unforeseen disruptions.

3.1. Family SES

The SES of families plays a crucial role in shaping educational opportunities, underscoring the stark reality that financial disparities directly influence access to quality education. Students from low SES backgrounds often experience disparities in educational attainment, the quality of education, and the breadth of educational opportunities. This discrepancy is observable across various countries [3].

Broer et al., drawing upon student data from the Trends in International Mathematics and Science Study (TIMSS), analyzed the achievement gap between high SES and low SES students. Their study, spanning the years 1995 to 2015 across 13 education systems, sheds light on the evolving performance of low SES students [9].

Furthermore, various factors, including parents' educational level, occupational status, family income, political standing, and household situation, significantly influence individuals' access to education [10]. The study also found a positive correlation between parents' educational attainment and the educational outcomes of their offspring [11]. Specifically, parents with compulsory education and above are markedly more likely to have children with high school and university education. Additionally, an analysis based on Chinese General Social Survey (CGSS) data across 70 age groups revealed that paternal educational attainment and occupational status consistently positively impact the educational levels of their offspring [12]. Consequently, this suggests that educational transmission persists across multiple generations, with paternal education exerting a more substantial influence on offspring compared to grandparental education.

This subsection delves into the nuanced implications of family SES on educational outcomes, emphasizing the imperative for targeted interventions. These interventions should not only address immediate financial constraints but also aim to disrupt the cycle of generational inequality.

3.2. Social Structure and Culture

Social structures and cultural norms play a crucial role in shaping educational opportunities, contributing to disparities through entrenched societal hierarchies, urban-rural divides, and cultural differences.

As posited by Liu et al., structural factors such as household registration and place of residence wield greater influence on children's educational outcomes in China than family and individual characteristics. Moreover, family non-monetary resources, such as expectations and parenting styles, trump family monetary resources, such as income, in determining children's educational achievement [13]. This underscores the marked distinctions in social structure and culture between China and the Western context.

Even in the face of positive changes, the amelioration of educational inequalities remains constrained by cultural norms. In their study on the Expansion and Intergenerational Mobility of Education, the authors analyzed data from the 2013 China Resident Income Survey. They concluded that educational expansion has generally heightened educational mobility, thereby reducing the likelihood of intergenerational downward mobility of educational attainment and increasing the likelihood of intergenerational upward mobility of educational attainment [14]. However, this pattern reflects the initial urban-rural disparity in educational attainment: children from families with less educated parents, predominantly from rural backgrounds, have benefited more from the expansion of basic education. The urban-rural educational divide can be attributed, in part, to certain cultural norms prevalent in rural areas, such as resistance to allowing offspring to attend university, which may impede progress in rural educational attainment.

This subsection explores the broader impact of social dynamics, recognizing that addressing educational inequality necessitates an understanding of the systemic barriers ingrained within societal structures.

3.3. Educational System Obstacles

Within the educational system, several obstacles and biases impede equal opportunities for students. Issues such as structural challenges, uneven distribution of resources, and biases in curricular design and assessment processes contribute to widening disparities.

Numerous studies have scrutinized the educational disparities between China and Western countries. Liu et al. argued that structural forces, notably hukou (household registration) and residence, exert a more substantial influence on children's educational outcomes in China than family and individual characteristics [11]. China-specific factors, such as the exclusive entry requirements

for public primary schools—hukou and school district residence—contribute to educational outcome disparities and arise from inherent barriers in the Chinese education system.

This subsection underscores the critical need for systemic reform by thoroughly analyzing these internal dynamics. In addition to education system policies, barriers to an inclusive educational environment may also manifest in curriculum development and the fair allocation of resources within educational institutions.

3.4. Educational System Obstacles

The unforeseen shocks, exemplified by the global COVID-19 pandemic, have served as a stark reminder of the vulnerability of educational systems and their disproportionate impact on marginalized communities.

The study conducted by Grewenig et al. investigated the impact of school closures due to the COVID-19 pandemic on German students. Their analysis of detailed time-use information for 1099 students revealed a significant reduction in study time, with low-achieving students experiencing a greater decline (4.1 hours) compared to high-achieving students (3.7 hours) [15]. This finding underscores the widening educational disparities exacerbated by the pandemic, as low-achieving students face challenges in compensating for reduced learning time due to limited support from parents and schools.

Moreover, the shift to home-based education during the pandemic has placed primary responsibility for education on parents [16]. Variations in the availability and utilization of educational resources among families contribute to disparities, with those of low SES encountering additional physical, time, cultural, and psychological barriers. Consequently, the impact of SES on educational inequality is magnified.

This subsection elucidates how external shocks, particularly those affecting economically disadvantaged students, disrupt traditional learning environments. Emphasizing the importance of resilience and adaptive strategies in crises, it highlights the imperative for robust contingency plans and innovative solutions. These considerations underscore the interconnectedness of global events and local educational disparities, calling for comprehensive approaches to address the multifaceted challenges posed by unforeseen events.

4. Strategies to Address Educational Inequality

Studies have examined the relationship between educational inequality and economic and social inequality. For instance, Coady & Dizioli discovered a substantial, statistically significant, positive, and consistent correlation between income inequality and educational disparity, which indicates that expanding education can lessen economic inequality by reducing educational inequality [17]. Therefore, measures to reduce inequalities in education are very important for the equality and harmony of society as a whole.

4.1. Government: Educational Policy Reforms

Governments wield significant influence in shaping the educational landscape. Policy reforms should address economic disparities, focusing on equitable resource distribution, improving infrastructure, and promoting inclusivity. Legislative changes and funding initiatives can be leveraged to create a more level playing field for all students.

4.2. Schools: Innovative Teaching Methods and Digital Resource

Educational institutions are pivotal in implementing change at the grassroots level. Embracing innovative teaching methods and integrating digital resources can cater to diverse learning needs. Online learning platforms not only provide flexibility but also have the potential to bridge gaps in access, ensuring that no student is left behind.

4.3. Communities: Establishing Community-Oriented Resource Centers

Communities play a crucial role in supporting educational equality. Establishing resource centers that are community-oriented can provide mentorship, additional educational resources, and a supportive environment for students facing disadvantages. By fostering a sense of community responsibility, these centers can contribute significantly to breaking down barriers to education.

5. Conclusion

In conclusion, the analysis presented in this paper unveils the intricate web of factors contributing to educational inequality, spanning SES, social structure and culture, educational system obstacles, and the disruptive impact of events like COVID-19. Educational disparities are not isolated occurrences but rather deeply rooted in a complex interplay of historical, societal, and systemic influences.

The urgency of addressing educational inequality is paramount. The examination of family SES highlights the economic barriers that hinder access, perpetuating a cycle of disadvantage. The exploration of social structures and culture underscores the importance of societal transformation to create an environment that fosters equal opportunities.

Internal to the educational system, obstacles demand systemic reform. Structural issues and biases within institutions perpetuate inequality, necessitating comprehensive changes in policy, curriculum, and resource distribution. Furthermore, the unexpected shocks, especially the global pandemic, have unveiled vulnerabilities in the educational system, disproportionately affecting those already disadvantaged.

Considering these findings, strategic interventions must be multi-faceted and collaborative. Governments must play a central role in policy reforms, ensuring equitable resource distribution and addressing economic disparities. Educational institutions should innovate, embracing digital resources and adapting teaching methods to cater to diverse learning needs. Communities are pivotal in establishing support systems and resource centers that empower students facing educational disadvantages.

Although the journey toward educational equality is arduous, collective efforts from governments, schools, and communities can pave the way for transformative change. Envisioning the future, the goal is to create a society where every individual, irrespective of their background, enjoys equal access to quality education, thereby contributing to a community that thrives on the principles of equity and shared opportunity.

References

[1] Salinas D. Can equity in education foster social Mobility? Paris: PISA in focus, NO. 89, OECD Publishing, 2008.

[2] Lee J.W., Lee L. Human capital and income inequality. Journal of the Asia Pacific Economy, 2018, 23 (4): 554-583.

[3] Blanden J., Doepke M., Stuhler J. National Bureau of Economic Research. In Educational inequality. Cambridge, Mass; National Bureau of Economic Research. 2022.

[4] Jiang Qiuchuan, Ren Jie. Unequal educational opportunities: new evidence from CEPS. Nankai Economic Studies, 2020, (4), 165-184.

[5] Ling T., Nasri N. M. A systematic review: Issues on equity in education. Creative Education, 2019, 10 (12): 3163.

[6] Ainscow, M. Promoting inclusion and equity in education: Lessons from international experiences. Nordic Journal of Studies in Educational Policy, 2020, 6 (1): 7–16.

[7] Morrison D., Annamma S. A., Jackson D. D. Critical Race Spatial Analysis: Mapping to understand and address educational inequity. Stylus Publishing, LLC, 2017.

[8] Crouch L., Rolleston C., Gustafsson M. Eliminating global learning poverty: The importance of equalities and equity. International Journal of Educational Development, 2021, 82: 102250.

[9] Broer M., Bai Y., Fonseca F. Socioeconomic inequality and educational outcomes. IEA Research for Education, 2019: 1–6.

[10] Zheng Lei, Qi Xiang, Hou Yuna. The intergenerational influence of family on children's education: theory, method and evidence, Social Development Studies, 2018, 5 (03): 177-202 & 245-246.

[11] Zou Wei, Ma Zhanli. Family background, intergenerational transmission and educational inequality, China Industrial Economics, 2019, (2): 80-98.

[12] Fang Changchun, Feng Xiaotian. Social origin and educational attainment—a historical examination based on 70 age group data from CGSS. Sociological Research, 2018, 33 (02): 140-163 & 245.

[13] Liu Airan, Li Wangyang, Xie Yu. 'Social inequality in child educational development in China', Chinese Journal of Sociology, 2020, 6 (2): 219–238.

[14] Luo Chuliang, Liu Xiaoxia, Gong Huayan.. Expansion and Intergenerational Mobility of Education. Social Sciences in China, 2021, 41 (2): 50-64.

[15] Grewenig E., Lergetporer P., Werner K. et al. Covid-19 and educational inequality: How school closures affect low- and high-achieving students. European Economic Review, 2021, 140: 103920.

[16] Doyle, O. COVID-19: Exacerbating educational inequalities. Public Policy, 2020, 9: 1-10.

[17] Coady D., Dizioli A. Income inequality and education revisited: persistence, endogeneity and heterogeneity. Applied Economics, 2018, 50 (25): 2747-2761.