From Gender Division to Gender Integration: Rethinking the Role of Education in the Workplace Within the Binary Gender System

Zhoumi Li

Shanghai Weiyu High School, Shanghai, China a139866@correo.umm.edu.mx

Abstract: In recent years, with the advancement of social development and globalization, the issue of gender equality has gradually become the focus of wide attention in all sectors of society. Although many countries and regions have made some achievements in promoting gender equality, the relationship between gender division of labor and education is still controversial and insufficient. This paper analyzes the dual role of education in promoting and challenging gender equality, focusing on the shaping and impact of education systems on gender roles in different cultural contexts. Through a comparative study of education models and gender status in BRICS countries (Brazil, Russia, India, China, and South Africa) and Japan, this paper concludes that although education plays a positive role in improving women's access to education and promoting gender identity in society, the entrenched gender roles still limit its effect. Based on this finding, this paper proposes to further optimize education policies, enhance gender awareness training, and promote innovation in educational content to promote the full realization of gender equality.

Keywords: Education Influence, Brics Countries, Gender Division of Labor, Workplace Gender Integration, Cultural Comparison

1. Introduction

1.1. Social Background and Research Background

The gender divide in the global Labor market continues to show significant structural features. According to the International Labor Organization, while women outnumber men in higher education enrollment (57% vs 43%), they account for only 28% of STEM (science, technology, engineering, and mathematics) occupations, compared with 76% in "caring" professions such as nursing and education. The divide is particularly sharp in developing countries: only 14% of engineering graduates in India, for example, are women, compared with 38% in Sweden.

The gendered nature of the education system exacerbates this contradiction. Implicit gender roles in the curriculum (e.g., male scientists account for 82% of the textbooks), teachers' differentiated expectations for students of different genders, and biased suggestions in career guidance (e.g., guiding girls to choose "stable" rather than "high challenge" occupations) together constitute the reproduction mechanism of gender division of labor in education [1].

1.2. Research Gaps and Significance

Although the existing literature has extensively discussed the relationship between gender division of labor and education, there is still a lack of analysis on the multiple roles and limitations of education in breaking the gender structure in the workplace, especially the specific performance in different cultural backgrounds. Most of the existing studies focus on the single cultural perspective, ignoring the cross-cultural comparative perspective. Comparing education policies in northern Europe with those in developing countries can reveal how institutional design influences education in shaping gender structures in the workplace. Based on this, this paper analyzes how education influences the transformation of workplace gender structure in different cultural contexts by providing diverse career options, breaking gender stereotypes, and promoting the reconstruction of gender roles. By comparing education policies and practices in different countries, this paper aims to analyze how education promotes gender equality in different cultural contexts and reveal the institutional and cultural challenges it faces to provide theoretical support and policy recommendations for future education reform in China.

2. The Role of Education in Gender Career Development: A Case Study

2.1. The Paradox between Educational Penetration Rate and Career Choice

Access to education is seen as an important means of promoting gender equality. However, despite advances in gender equality at the basic education level, gender disparities persist in the occupational field, and they manifest themselves differently in different countries.

2.1.1. The Positive Role of Education in Eliminating Gender Bias - Finland's Successful Experience

Finland has significantly increased female participation in engineering disciplines through its Gender-Neutral Curriculum, with the proportion of female engineers rising from 12% in 1990 to 34% in 2020. Finland's education policy aims to eliminate gender bias and promote gender equality by:

First, at the primary level, Finland has abandoned traditional gender labels, especially in math and science. For example, math and science courses, which were considered "male advantaged subjects," were renamed "problem solving classes," eliminating gender bias. This change allows boys and girls to have no gender boundaries in knowledge acquisition, breaking down gender role stereotypes.

Second, Finnish secondary schools, through "career exploration weeks", require girls to participate in traditionally male-dominated mechanical engineering activities, while boys are encouraged to participate in female-dominated fields such as childcare. This kind of transgender career practice helps young people realize from practice that gender does not determine career choice [2].

In addition, in physical education, Finland has also adopted a gender-neutral approach, no longer divided into groups according to gender, but let students choose activities according to their interests, such as girls can choose ball games, boys can choose dance, such an arrangement provides students with more choice space, avoiding gender restrictions on participation [2].

The case of Finland shows that education policies that eliminate gender bias at the basic level of education can be effective in promoting gender equality, especially in career choices. The success of this strategy reflects the enormous potential of education to change perceptions of gender roles.

2.1.2. The Objective Existence of Gender Bias in the Workplace: A Challenge in Brazil

Although Brazil has achieved gender equality in basic education, the gender division of labor in the workplace remains high. According to the United Nations Development Program (UNDP), Brazil's

gender Division of Labor Index (GDI) remains high at 0.98, indicating that there is still a significant difference between men and women in the workplace. The labor force participation rate for women remains low compared to that of men, and the proportion of women in formal employment is only 48.8 percent, compared to 53.2 percent for men [3].

The gender gap Brazil faces in the workplace is particularly evident in the distribution of high-paying and high-skilled occupations. Although women's participation in higher education exceeds that of men, the market wages they receive do not fully reflect their educational advantages, especially in traditionally male-dominated fields such as law, medicine, and engineering, where women are still underrepresented. In addition, although the number of hours worked by women has increased, the wage gap remains significant. In 2008, women earned just 84 percent of what men earned, and among those with 12 years or more of education, women earned just 58 percent of what men earned.

The Brazilian case reveals an important paradox: Despite the gradual increase in educational penetration, especially among women, the advantages of education have not effectively translated into gender equality in the workplace. This shows that there are gender differences in the connection between education and workplace needs, and gender inequality in the workplace is still limited by traditional social concepts and occupational structures.

Finland's education reform has demonstrated that adopting a gender-neutral curriculum at the basic education level can effectively increase women's participation in traditionally male-dominated fields and promote gender equality. However, the case of Brazil shows that despite progress towards gender equality in education, there are still deep gender differences in the workplace. Education policies can change perceptions in the short term, but to achieve true gender equality, the gender gap will eventually be closed by restructuring the workplace, breaking down gender role stereotypes, and improving career opportunities for women. Therefore, the interaction between education, social structure, and workplace culture still needs to be further explored to realize the effective transformation of educational achievements into occupational equality.

2.2. Policy Design and Thinking Guidance

2.2.1. Active Policy Guidance – Sweden's "Subversive Intervention"

Since the late 1990s, Swedish education policy has continued to pay attention to promoting gender equality in the field of education. Long-term attention reflects its firm pursuit of this goal, but long-term persistence provides a time guarantee for policy implementation and effect accumulation. In addition, Sweden has adopted policies to ensure the careful analysis of school materials to eliminate gender stereotypes. For example, in the use of language in teaching materials, following the recommendations of UNESCO, the use of gender-neutral and inclusive language; The pictures in the textbooks pay attention to gender balance, avoid spreading gender stereotypes, and actively show the positive image of women, but there is a lack of specific data on the changes in students' gender concepts before and after the optimization of the textbooks.

Finally, the Swedish education sector actively conducts teacher training, including gender equality as an important training theme and involving school staff and parents. Manuals and guidance documents have also been published, setting gender equality as a key theme for educational leaders [4].

2.2.2. Actual Gender Issues in the Workplace -- South Korea's Gender Workplace Dilemma

The South Korean government provides educational training programs, including vocational training and apprenticeships, to help women upgrade their skills and increase their chances of success in the labor market [5]. The Equal Employment Opportunity Law prohibits employers from discriminating against employees based on gender in recruitment, promotion, and pay, and requires employers to

provide equal employment opportunities to protect women's employment rights and interests from the legal level.

But gender inequality in the workplace persists. First, South Korean women are underrepresented in high-skilled, high-paying jobs, with women in the same occupations and with the same qualifications being paid less than men. South Korea has the highest gender wage gap in the Organization for Economic Cooperation and Development (OECD) at 34.6 percent, reflecting women's disadvantage in accessing high-paying job opportunities and pay packages. In addition, Korean women face obstacles to career development after entering the labor market, such as long working hours, limited access to training, and a lack of networking opportunities, which make it difficult for them to advance their careers. Finally, although women's participation in economic activities in South Korea has increased, the level remains low compared to most developed countries. The average of the economically active population in advanced OECD countries is 53.4 percent, but Korean women's participation in economic activities is relatively low.

2.3. Structural Manifestation of Workplace Differences

In the modern workplace, gender differences exist widely, and there are profound cultural factors behind them. The belief of gender status that exists in society generally has different judgments on the social value and ability of men and women. Ridgeway pointed out that status beliefs based on gender, race, class, and other factors make people generally believe that men have more status value and ability than women, which is obvious in the cognition of authority in the workplace. Studies by Koenig et al. and Hentschel et al. also confirm that men are seen as more suitable for positions of authority. To put this in perspective, only 19% of the Dutch sample had at least some supervisory tasks for women, compared with 34% for men; Women hold only 2 percent of the positions that primarily oversee and control organizational resources, while men hold 4 percent. This shows that under the influence of cultural concepts, the proportion of men in various authority positions is far more than that of women, which is an important reflection of gender differences in the workplace [6].

The people-thing dimension of gender stereotypes also has an important impact on the workplace. This dimension proposed by Prediger indicates that women are often associated with personnel-related affairs, while men are closely associated with transactional work. This stereotype extends to positions of authority in the workplace, leading to the belief that women are better suited to managing human resources and men are better suited to managing organizational resources.

Traditional perception of the image of managers is also one of the cultural factors that lead to gender differences in the workplace. In describing the development of managerialism under corporate capitalism, Kanter mentioned that the image of competent managers in the early days was endowed with a "male ethic", emphasizing male traits such as rationality, efficiency, and emotional restraint. Although the influence of this perception has diminished over time, men are still seen as more suited to positions of authority. This makes it harder for women to reach positions of high authority and status, and they are less represented in these positions than men, further highlighting the gender gap in the workplace.

3. Gender Equality Education Causes and Obstacles

Although gender equality education is receiving increasing attention worldwide, there are still many obstacles to advancing this goal. From the content of teaching materials to funding problems, teacher attitudes, and social and cultural traditions, all become important factors that make gender equality education difficult to achieve. The following is a specific analysis of these obstacles and their causes.

3.1. Stereotypes in Education

In many countries, gender bias in educational content remains widespread. Studies have shown that textbooks and curriculum content often have a significant imbalance in gender representation. For example, in an analysis of 28 Syrian textbooks for grades 8 to 12, male characters appeared in 75% of the curriculum content and accounted for 87% of the biographical characters. This gender bias is not limited to the number of characters but also manifests itself in stereotypes of male and female roles, such as male dominance in the family and profession, while women are more often portrayed as housewives or caregivers. Such a way of presentation not only inhibits the development of women's social roles but also invisibly strengthens the solidification of gender roles [7].

In addition, teachers' gender bias in the classroom also affects gender equality in education. Especially in countries with higher gender inequality, teachers tend to have more negative attitudes towards girls, which adversely affects girls' academic achievement. Research shows that teachers' attitudes not only affect students' self-confidence but may also have a significant negative effect on their academic performance, thus exacerbating gender education inequalities.

3.2. Historical Factors and Social Concepts

Social concepts and historical factors are important obstacles to the advancement of gender equality education. In some cultures, the traditional definition of male and female roles is very strict. For example, in the Orthodox Revival movement, women's social roles were limited to the family, female obedience and gentleness were emphasized, and female participation in the public sphere was excluded. This cultural background not only affects the social status of women but also makes it difficult for the concept of gender equality education to be widely accepted.

In addition, many social and cultural traditions emphasize male leadership in the family and control over social status and resources, which has led to male dominance in the distribution of family and educational resources. Women, on the other hand, are often expected to shoulder the responsibility of housework and family care and are at a disadvantage in the allocation of educational resources. This social structure of gender inequality makes women face more restrictions and challenges in education.

3.3. Policy Support

Lack of funding is also a major obstacle to promoting gender equality in education. Although some international organizations, such as the World Bank, invest heavily in education, only a small proportion of the money goes to gender-related projects. For example, the World Bank invested more than \$25 billion in education between 1990 and 2005, but only a fifth of that went to gender-related projects. This shows that the advancement of gender equality education is often limited by funding, especially for poor countries, and the lack of funding makes the reform process slow and difficult [6].

In China, despite funding from international organizations such as the Ford Foundation, research on gender bias in teaching materials has been carried out, but the lack of adequate funding and support has limited the progress of relevant research and reform. Without financial and policy support, many poor countries are unable to afford education reform, and the advancement of gender equality education is hampered.

Gender equality education faces many obstacles. From the gender bias in the content of textbooks and teachers' attitudes to the deep influence of social and cultural traditions and historical factors to the lack of funds and policy support, these problems jointly restrict the promotion of gender equality education. Therefore, to effectively promote gender equality education on a global scale, multiple levels of policy, funding, culture, and educational content must be reformed. Only by eliminating stereotypes, providing adequate financial support, changing social attitudes, and promoting

continuous improvement of education policies can more favorable conditions be created for achieving gender equality in education.

4. Reconstruct Policy Suggestions

4.1. Curriculum Reform and Teaching Practice

Internationally, some countries, such as Sweden, have taken positive steps to eliminate gender discrimination in education. Sweden has been focusing on gender equality in education since the late 1990s, gradually eliminating gender bias in the education system through legislation and curriculum review. For example, Sweden has changed gender discrimination in educational practices by reviewing teaching materials to ensure that the content is no longer gender-stereotypical and by providing teachers with relevant gender equality training. In the Polish and Spanish studies, there is still a significant gender bias in school textbooks, many textbooks ignore the contribution of women, and there is still gender inequality in language and image representation. This shows that even in some developed countries, the issue of gender bias in teaching materials and curricula is still not fully addressed.

In response to this phenomenon, China can learn from the experiences of these countries and promote curriculum reform. In this regard, gender bias in curriculum content can be revised through gender review to provide equal educational opportunities for male and female students. At the same time, teacher training is also crucial. By increasing gender awareness and training of teachers, ensure that they can eliminate gender bias in the classroom and treat every student fairly [8]. Curriculum design should abandon traditional gender roles and allow students to choose subjects based on their interests and abilities, rather than being influenced by gender stereotypes. In addition, the Government and the education sector should strengthen the review of teaching materials to ensure that they do not contain gender bias and stereotypes, and that teaching materials and teaching materials fairly present the roles and achievements of women and men in all fields [9].

4.2. Innovative Mix of Policy Instruments

To promote gender equality education from a policy perspective, it is first necessary to review existing education policies to ensure that they do not have an unequal impact on gender. For example, gender-specific scores should be eliminated from the admissions process to ensure equal access to education for students of all genders. At the same time, the education department should strengthen the supervision of the implementation of gender equality policies to ensure that the policies are not affected by gender bias in the actual enrollment and allocation of educational resources. Secondly, some existing legislation on gender equality education needs to be further revised, especially the relevant laws, which should be updated from the perspective of gender equality to ensure that gender equality is not only at the theoretical level but can be implemented into specific educational practices [9]. Through these measures, countries can help ensure that gender equality is truly achieved in education and that girls and boys have equal access to education.

4.3. Restructuring Strategies of Workplace Ecology

Education is an important factor in shaping the workplace ecology. If gender equality education can be realized, it will help to break gender stereotypes and provide equal development opportunities for men and women. First, fostering gender equality in education can help break down students' stereotypes of gender roles so that they can have a more equal approach to job opportunities and career advancement when they enter the workforce. In addition, corporate and workplace policies should also introduce gender equality measures to ensure that pay, promotion, and other aspects are

not affected by gender and that male and female employees can have equal development opportunities. The government can also introduce measures to encourage women's active participation in politics, increase the proportion of women in political leadership and decision-making levels, and gradually break gender bias through education and social advocacy to promote the restructuring of the social and workplace ecology.

These measures will contribute to the reconstruction of a more equitable and inclusive workplace environment so that every individual, regardless of gender, can participate equally in social and workplace activities, thereby advancing the social goal of gender equality [10].

5. Conclusion

Through a comparative analysis of education models and gender status in developing countries such as the Nordic countries and the BRIC countries, this paper explores the dual role of education in promoting gender equality and challenging the gender division of labor. The paper finds that despite some progress in increasing access to education, especially in expanding educational opportunities for women, entrenched gender roles and traditional biases in cultural and social structures still cause significant gender divisions in the workplace. This phenomenon not only reflects the disconnect between education and the workplace but also reveals the multiple challenges in achieving gender equality. Through the analysis of cases in different countries, the paper concludes that education plays an important role in promoting gender equality, but its effect is limited by the deep influence of social traditions and cultural attitudes. To better achieve gender equality, education policies should pay more attention to the popularization of gender awareness and the innovation of educational content, strengthen the transmission of gender equality concepts, and promote the optimization of the workplace environment and the breaking of gender roles. In addition, countries should learn from the successful experience of Finland and other countries, implement long-term effective policy intervention, combined with social, economic, cultural, and other levels of reform, to achieve the transition from gender division of labor to gender integration.

Therefore, education reform is only one part of achieving gender equality in the workplace. Only through comprehensive institutional guarantee, cultural guidance, and social support can the complete transformation of gender roles on a global scale be promoted and finally achieve the ideal state of gender integration.

References

- [1] Sadker, D., & Zittleman, K. R. (2009). Still Failing at Fairness: How Gender Bias Cheats Girls and Boys in School and What We Can Do about it. Simon and Schuster.
- [2] Myyry, S. (2022). Designing the Finnish Basic Education Core Curriculum: The Issue of Gender Binarism. Gender and Education, 34(8), 1074-1090.
- [3] Agénor, P. R., & Canuto, O. (2013). Gender Equality and Economic Growth in Brazil.
- [4] Lundahl, L., Arreman, I. E., Holm, A. S., & Lundström, U. (2013). Educational marketization the Swedish way. Education inquiry, 4(3), 22620.
- [5] Sabitkyzy, A. (2023). Gender Inequality in the Labor Market in South Korea. Journal of Oriental Studies, 105(2), 81-86.
- [6] Stojmenovska, D., Steinmetz, S., & Volker, B. (2021). The Gender Gap in Workplace Authority: Variation across Types of Authority Positions. Social Forces, 100(2), 599-621.
- [7] Blumberg, R. L. (2007). Gender Bias in Textbooks: A Hidden Obstacle on the Road to Gender Equality in Education. Paris: Unesco.
- [8] Qu, S. (2022). A Brief Analysis of China's Gender Equality Education Policy. University (05), 25-28.
- [9] Esteves, M. (2018). Gender Equality in Education: A Challenge for Policy Makers. International Journal of Social Sciences, 4(2), 893-905.
- [10] Henry, M., Lingard, B., Rizvi, F., & Taylor, S. (2013). Educational Policy and the Politics of Change. Routledge.