

A Study on Effect Evaluation and Optimization Paths of Education Equity Policies in the Process of Higher Education Popularization

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Abstract

The popularization of higher education is a global trend, yet the expansion of its scale tends to exacerbate the imbalance in resource allocation. This paper takes China, the United States, and Australia as case studies and compares the educational equity policies of the three countries based on the Salmi's framework. The study finds that China's "Special Programs" have strengthened opportunity equity, but financial constraints have hindered their implementation; the United States relies on the parallel implementation of laws and financial aid to form a "opportunity + economy" dual-track guarantee, yet conflicts between the federal government and states have weakened its effectiveness; Australia has achieved data-driven governance through the "Martin Indicators", while educational equity for indigenous people still awaits breakthroughs. The policy models of the three countries respectively demonstrate the advantages of precise targeting, legal enforcement, and data governance, but they all generally face structural dilemmas. This paper proposes that policies should be aligned with the development stage, evaluation tools should be upgraded to improve accuracy, and multidimensional collaboration should be adopted to enhance sustainability in education.

Keywords

Education equity policies, Higher education popularization, Sustainable development

Introduction

According to statistics from the United Nations Educational, Scientific and Cultural Organization (UNESCO), the global gross enrollment ratio in higher education increased from 19% in 2000 to 40% in 2022 and is expected to exceed 50% by 2030 (UNESCO Institute for Statistics, 2022). The international community generally defines the stage of popularization as when the gross enrollment ratio in higher education exceeds 50%, indicating that popularization has become an inevitable trend in global education development. However, without scientific policy guidance and macro-control, the expansion of higher education scale may exacerbate inequalities in the distribution of educational resources and even strengthen social stratification. Against this backdrop, countries around the world have introduced targeted policies to ensure educational equity in the process of popularization. For instance, some scholars have proposed that there is a close linkage between educational equity and the achievement of the Sustainable Development Goals, and insufficient equity will weaken

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education's supporting role in social sustainability (Unterhalter, 2019). However, existing studies mostly focus on single countries, lacking cross-national comparisons based on a unified framework.

This paper aims to identify the commonalities, effectiveness, and shortcomings of higher education equity policies across the three countries and attempts to address three research questions: first, what are the main turning points and causes of the educational equity policies in the three countries? Second, what achievements and shortcomings have been realized in promoting fairness through different institutional paths? Third, what implications do these experiences have for other countries? Through this comparison, this paper intends to provide a new analytical perspective and feasible pathways for the optimization of equity policies against the backdrop of the popularization of higher education.

Methodology

This study employs a comparative analysis method, drawing on the classification framework for the development level of higher education equity policies (Emerging-Developing-Improving-Advanced) proposed by Salmi et al. (2015). In terms of sample selection, the research focuses on three countries that have entered the popularization stage and represent different development types: China (Developing), the United States (Improving), and Australia (Advanced). The selection of policy documents is mainly based on their representativeness and authority in national education strategies or higher education reforms, such as laws and regulations, national-level policy documents, and long-term plans, supplemented by academic research and reports from international organizations.

Vertically, this study combs through the evolutionary stages of higher education equity policies in the three countries, extracts policy turning points, and analyzes the drivers of institutional change. Through quantitative analysis of policy texts, it compares the practical differences in educational equity policies among countries at the levels of legal provisions, national strategies, and other dimensions.

Horizontally, this paper compares the motivational correlations of policy effectiveness among the three countries, analyzes the institutional roots of their limitations, and thus explores the adaptive characteristics and phased advantages of the three countries within the educational equity governance framework. It aims to extract universally applicable and differentiated policy optimization paths.

Results and Discussion

The Evolutionary Logic and Motivations for Institutional Change of Higher Education Equity Policies in Three Countries - China: The Transition from "Compensatory Equity" to "Differential Equity"

Stage of Equality-based Equity (Early Reform and Opening-up Period): In the early stage of transition from a planned economy to a market economy, policies were guided by the principle of "efficiency first." The resumption of the college entrance examination system emphasized equal opportunities for competition, with market rationality as the dominant approach. The core goal was to serve socioeconomic development. However, contradictions in the urban-rural dual structure continued to accumulate, with the enrollment rate of rural students being less than one-third that of urban students (Liu, 2022).

Stage of Compensatory Equity (After the 1999 Enrollment Expansion): Institutional correction was adopted to redress historical inequalities, with a focus on safeguarding the rights and interests of vulnerable groups. Although the 1999 college enrollment expansion policy increased the enrollment rate from 9.8% in 1998 to 23% in 2007, empirical studies have shown that discrepancies between the policy's original intent and its implementation led to the widening of class gaps (Li, 2010). In 2005, the proportion of rural students in key universities dropped to 30% (compared to 60% in 1978) (Li, 2010). Social anxiety over the phenomenon that "it is difficult for children from poor families to achieve success" triggered public backlash. The enrollment expansion failed to narrow the urban-rural divide; instead, it exacerbated class and regional inequalities.

Stage of Differential Equity (2012 to Present): Focus events served as catalysts for policy transitions—the 2011 exposure of a survey revealing only 17% of Tsinghua University students were from rural areas triggered an intense discussion on the "crisis of educational equity". Government decision-making concepts shifted from "efficiency first" to "minimum baseline equity". The 2012 "Special Programs" (such as targeted enrollment in poor rural areas) marked a policy turning point, promoting the transformation of equity concepts toward "meeting differentiated needs" through precise support for rural/poor students (Liu, 2022).

Meanwhile, there were also simultaneous adjustments in fiscal policies: after the full implementation of the tuition fee system in 1997, tuition fees accounted for 33.66% of total expenditure (in 2007) (Armstrong & Chapman, 2011). The imperfect funding system once restricted equity, and the phenomenon of "poverty caused by education" intensified social contradictions. The 2007 reform of the funding system has promoted the coverage of the China Development Bank's loan model for poor students, attempting to alleviate economic barriers.

The United States: Collaborative Promotion of Legal Amendment and Special Programs

Legal Amendments: The 1954 *Brown v. Board of Education of Topeka* case abolished racial segregation, the 1964 Civil Rights Act prohibited educational discrimination, and Title IX of the 1972 Education Amendments explicitly banned gender discrimination. As a turning point in U.S. education policy, Title IX advanced educational equity from a concept to institutional practice through federal mandatory enforcement, reshaping the educational ecosystem via dynamic judicial interpretation and quantitative equality standards. The 1978 *Regents of the University of California v. Bakke* case ruled that "racial quotas are illegal but can be considered as a pluralistic factor," establishing a framework of "limited affirmative action" (DuBose, 2002).

Special Funding Programs: The 1965 Higher Education Act established the Pell Grant to provide federal funding for low-income students. In the 1990s, policies shifted toward tax credits, benefiting the middle class, but low-income students' reliance on loans triggered a debt crisis (Powers, 2014).

The Affirmative Action policies and the Pell Grant has theoretically formed a dual guarantee of "opportunity + economy", but state-level policies have repeatedly weakened the synergy effect. For example, California's Proposition 209 in 1996 prohibited racial preferences (Akhtari et al., 2020). Additionally, ethnic minorities are more sensitive to funding, but insufficient financial resources limit their policy benefits.

Australia: From Conservatism to Data-Driven Egalitarianism

Australia's trajectory in higher education equity can be characterized as a shift from conservatism to data-driven egalitarianism. During the Conservatism period (1945–1960), higher education was elitist and served only select professional groups. Entering the Liberalism period (1960–1988), tuition fees were abolished, scholarships expanded, and higher education became increasingly democratized. The Whitlam government's 1974 implementation of free education (Khan & Tarafder, 2020), a key milestone in Australia's equity policies, broke down class-based educational barriers, promoted democratic advancements in higher education, and significantly increased working-class enrollment. In the Egalitarianism period (1988–present), the 1988 Dawkins Reform abolished the binary university system and introduced the Higher Education Contribution Scheme (HECS), while the 2008 Bradley Review established the Martin Indicators, which quantitatively assess equity progress for six target groups (including low-SES students, Indigenous Australians, and students from remote areas) using data such as enrollment and retention rates (Pitman et al., 2019). Although free education once promoted intergenerational mobility—with Australia ranking among the top in the OECD—policy rollbacks since 2014 have slowed mobility gains. The COVID-19 pandemic further exacerbated the challenges faced by vulnerable groups, prompting the introduction of the Best Chance for All policy roadmap to strengthen lifelong learning and data-driven approaches (Kift et al., 2021).

Motivational Correlations of Policy Effectiveness and Policy Limitations in Three Countries

Table1. Motivational Correlations Between Policy Effectiveness and Institutional Limitations in Three Countries

Country	Key Policies	Triggering Factor	Policy Effectiveness	Institutional Roots of the Limitations
China	Rural Special Enrollment Programs	"It Is Difficult for Children from Poor Families to Achieve Success" Public Opinion Crisis + Targeted Poverty Alleviation Strategy	The admission rate in poor counties has increased by 10% (Data source: Ministry of Education), but the contradiction of inter-provincial	Financial weakness in less developed provinces hinders policy implementation

Country	Key Policies	Triggering Factor	Policy Effectiveness	Institutional Roots of the Limitations
The United States	The Pell Grant	Youth Unemployment Crisis+ Civil Rights Movement	quotas remains unsolved. 34% of undergraduate students have been covered, but the funding gap leads to diminishing effectiveness (Powers, 2014).	The "race-sensitive policies" promoted by the U.S. Democratic Party and the Republican-led "color-blind principle" alternately dominate, leading to repeated reversals of Affirmative Action policies; the federal decentralized structure causes state policies to conflict with federal goals.
Australia	Martin Indicators	Exposure of Class Gap Data + New Public Management Ideology	The enrollment rate of students from low SES backgrounds has increased by 15% (Pitman et al., 2019), but the retention rate of indigenous students remains low.	The trauma left by colonial history has trapped indigenous policies in a "compensation-dependency" paradox.

Table 1 shows that the policies of all three countries have promoted social mobility to varying degrees. China's "Special Programs" have enhanced opportunity equity; the parallel implementation of laws and financial aid in the United States reflects collaborative governance; and Australia's "Martin Indicators" have advanced full-cycle monitoring. However, the three are respectively constrained by factors such as finance, institutional fluctuations, and historical culture, indicating that equity governance needs to balance the three dimensions of "opportunity-process- outcome".

Optimized Path of Hierarchical Construction

Table 2. Core Advantages of the Three Countries' Policies and Their Stage-Adaptive Characteristics

Country	Core Advantages	Applicable Countries
China	Targeted and Rapid Response: - Special enrollment programs cover poor counties. - Five-Year Plans ensure policy continuity.	Countries in a transitional period with limited resources that need to prioritize resolving regional/class differentiation (such as the gap in enrollment rates between urban and rural areas)
The United States	Legal Mandate and Market Complementarity: - Affirmative Action policies safeguard racial equity. - The Pell Grant collaborates with state policies.	Countries with pluralistic social structures and mature legal foundations that need to balance disputes between efficiency and fairness (such as reverse discrimination)
Australia	Data-Driven Dynamic Governance: - Martin Indicators quantitatively monitor fairness throughout the entire cycle (enrollment rate/retention rate/completion rate). - Enterprise-collaborative skill training system.	Countries with highly universal higher education and complete data systems that need to address structural equity issues (such as intergenerational transmission of indigenous education)

Table 2 indicates that policy design should align with a country's stage of development. Countries in the "Developing" stage should give priority to ensuring opportunity equity and strengthen financial support as a bottom-line guarantee; countries in the "Improving" stage need to strike a balance between law and market to ensure that process equity is not undermined; and countries in the "Advanced" stage should focus on outcome equity, achieving structural optimization through data closed-loop systems and multi-stakeholder participation.

Conclusion

The experiences of China, the United States, and Australia demonstrate that during the popularization of higher education, the orientation of equity policies should shift from "equality of opportunity" to "equity of outcomes"—focusing on the whole-process development of vulnerable groups to inject sustained momentum into the sustainable development of education. Policy tools should integrate data-driven approaches (such as Martin Indicators) and multi-stakeholder collaboration (e.g., special programs) to enhance resource allocation efficiency and achieve long-term benefits of educational input-output. Additionally, the governance framework are expected to break through the single educational dimension, embed itself in the overall strategy of social equity, and construct a virtuous cycle coordinated with economic, social, and environmental development.

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