The general-vocational education integration (GVEI) is an initiative of strategic significance for Chinese educational reform in the new era, aiming to integrate general and vocational education resources to provide more diverse educational options for students and cultivate high-quality technical talent. Nevertheless, the GVEI at the secondary level encounters the challenge of “one-way student flow,” a strong bias towards vocational-to-general transition in vocational education students. The issue is a severe deviation from the original objective of developing GVEI. This article focuses on delineating the phenomenon and pinpointing the causes underlying it, with a view to providing implications for the successful implementation and advancement of GVEI.

**Keywords:** General-Vocational Education Integration; Vocational Education; General-Vocational Education Streaming; Education Choice

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**Introduction**

GENERAL-VOCATIONAL education integration (GVEI) is an initiative of vital strategic importance for the new era’s educational reform in China. It seeks to break down the traditional boundaries between general and vocational education to better leverage the resources of the two different education tracks (1). This notion aligns with China’s current socioeconomic development needs as well as the trends in global education development.

To support the development of GVEI, the Chinese government has issued a series of papers as policy guarantees and directions. For example, 2019’s “Guiding Opinions of the General Office of the State Council of China on Promoting the Reform of General Senior Secondary Education in the New Era” recommends devices such as the exchange of courses, mutual recognition of credits, and resource sharing between general high schools and secondary vocational schools to promote the integration of general and vocational education (2). The “Opinions on Promoting the High-Quality Development of Modern Vocational Education,” released in 2021, emphasizes the neces-
vity of tailoring vocational education to local circumstances and encouraging the coordinated development of vocational and general education (3).

The implementation of GVEI is conducive to the enhancement of educational equity, optimization of educational structure, and improvement of the quality of education. Particularly, it undermines the academic-focused tendency in traditional education, expanding education choices among students. Also, GVEI contributes to producing high-quality technical workforces with both solid theoretical knowledge foundations and practical capacities (4). Despite the well-acknowledged benefits of GVEI, its implementation process has featured a biased transition from vocational to general education for senior secondary school students. The heavily skewed student flow deviates from GVEI’s primary goal. This study seeks to delineate the issue and delve into its underlying causes in an effort to contribute to the substantive advancement of GVEI in China.

From “General-Vocational Education Streaming” to “General-Vocational Education Integration” in Senior Secondary Education

The notion of “general-vocational education streaming (GVES)” in China first surfaced in “The Decision on Reforming the Education System,” released by the Chinese government in 1985. The paper proposed that general-vocational education streaming in adolescents should begin at the secondary level and that within the ensuing five years, the enrollment of vocational and technical schools should become roughly equal to that of general senior secondary schools in most regions in order to vigorously develop vocational and technical education (5). The proposal is also known as the “General-to-Vocational Students Roughly Equivalent (GVRE)” policy, a major adjustment in the Chinese educational system since the founding of the People’s Republic of China (6). In the subsequent decades, the “general-vocational student ratio (GVR)” has stood at approximately 1:1 in senior secondary education. This initiative guaranteed a reserve of student resources for the development of secondary vocational education. Table 1 is an illustration of the GVRs between 2009 and 2020.

The 1996 Vocational Education Law gives a more comprehensive definition of “general-vocational education streaming” as a practice of education tracking at various educational levels with a focus on the post-junior secondary phase, based on actual levels of economic development and universalization of education in different regions. The law also affirms that streaming is intended to help develop an effective vocational education system that is based on coordination with other forms of education (8). There are two critical points in GVES: the selective “senior secondary school entrance examination” and the “college entrance examination (known as Gaokao in China).” After the tracking, some students enter vocational schools or colleges, and the others are enrolled in general education institutions (8). GVES at the secondary level under the law has been instrumental in educating and training a wealth of skilled workforces for the rapid development of the Chinese economy over the years.

However, after several decades’ development, China’s economy and industry exhibited a strong tendency towards adjustment and transformation. The economic and industrial development of the new era necessitated an upgraded vocational education system that could provide highly competent technical workers for businesses and support the high-quality employment of students. In May 2022, the China Vocational Education Law took effect, in which the concept of GVES was replaced by that of GVEI (9). According to “The Interpretation of the China Vocational Education Law,” GVEI is the coordinated development of vocational and general education under relevant policies and mechanisms, aimed at integrating vocational and general education resources and realizing mutual recognition of educational experiences between general and vocational schools to support student holistic development (10).

GVEI at the secondary level is the first streaming Chinese students experience throughout the education system. It largely depends on students’ achievements in the senior secondary entrance examination, after which higher-achieving students are promoted to the general senior secondary schools and have the chance to proceed to universities, whereas the lower-achieving ones enter the vocational track (11). This practice leads to the pressure of Gaokao being extended to the junior secondary or even primary level, resulting in an academic overburden for Chinese students. In the meantime, under the academic qualification-valued social culture, the GVRE policy substantially exacerbates parents’ anxiety over their children’s school progression. As educational ideas were upgraded, the rigid system of GVES could no longer satisfy societal needs for a more diverse variety of talents, nor could it cater to students’ needs for individualized development.

In this context, the notion of GVEI at the secondary level was advanced with an emphasis on the bilateral integration of vocational and general education in order to realize resource sharing through collaborative curriculum design, teaching staff exchange, mutual recognition of credits, and transferrable enrollment (12). To drive the development of GVEI, the state has provided policy support to encourage in-depth cooperation between general high schools and secondary vocational schools, including the exploration of innovative GVEI models such as the general and vocational education-integrated classes. Measures like these are meant to demolish barriers between vocational and general education, provide students with more flexible educational paths, and thereby alleviate parents’ anxiety about their kids’ school progression.

The Tendency of “One-Way Student Flow” in GVEI at the Senior Secondary Level

The original aim of the GVEI initiative was to provide platforms for the interaction of general and vocational education on an equal footing and to build a flexible education system that allows students rational education choices. Legitimate GVEI should be a two-way process that permits students to transfer between the two educational tracks according to their specific circumstances, based on relevant regulations (13). Nevertheless, in the practical implementation of GVEI, the unequal positions of the two tracks remain. The transition of students from the vocational to general tracks features the student flow in GVEI at the senior secondary level, while that in the opposite direction seldom occurs (14). Numerous students in the vocational track opt to enter the general track after taking and passing prescribed
Table 1. Senior Secondary School Enrollments 2009-2020 (7).

<table>
<thead>
<tr>
<th>Year</th>
<th>General Senior Secondary School Enrollments</th>
<th>Secondary Vocational School Enrollments</th>
<th>Total Enrollments</th>
<th>GVRs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>876.44</td>
<td>644.66</td>
<td>1521.10</td>
<td>58.42</td>
</tr>
<tr>
<td>2019</td>
<td>839.49</td>
<td>600.37</td>
<td>1439.86</td>
<td>58.42</td>
</tr>
<tr>
<td>2018</td>
<td>792.71</td>
<td>557.05</td>
<td>1349.76</td>
<td>59.41</td>
</tr>
<tr>
<td>2017</td>
<td>800.05</td>
<td>582.43</td>
<td>1382.49</td>
<td>58.42</td>
</tr>
<tr>
<td>2016</td>
<td>802.92</td>
<td>593.34</td>
<td>1396.26</td>
<td>58.42</td>
</tr>
<tr>
<td>2015</td>
<td>796.61</td>
<td>601.25</td>
<td>1397.86</td>
<td>57.43</td>
</tr>
<tr>
<td>2014</td>
<td>796.60</td>
<td>619.76</td>
<td>1416.36</td>
<td>56.44</td>
</tr>
<tr>
<td>2013</td>
<td>822.70</td>
<td>674.76</td>
<td>1497.45</td>
<td>55.45</td>
</tr>
<tr>
<td>2012</td>
<td>844.61</td>
<td>754.13</td>
<td>1598.74</td>
<td>53.47</td>
</tr>
<tr>
<td>2011</td>
<td>850.78</td>
<td>813.87</td>
<td>1664.65</td>
<td>51.49</td>
</tr>
<tr>
<td>2010</td>
<td>836.24</td>
<td>870.42</td>
<td>1706.66</td>
<td>49.51</td>
</tr>
<tr>
<td>2009</td>
<td>830.34</td>
<td>868.52</td>
<td>1698.86</td>
<td>49.51</td>
</tr>
</tbody>
</table>

The tendency toward biased student flow in GVEI has repercussions for both general and vocational education. First, it exacerbates the academic competition in general secondary education. Higher education resources in China remain insufficient because of its huge population. Students vie for admissions to prestigious universities through their successes in Gaokao to secure future professional development (16). The academic pressures on students at general high schools are exorbitantly heavy. Under the previous GVES system, students who failed to enter the general education track after junior secondary schooling lost the opportunity to enter universities. Now, with the GVEI initiative, students in the vocational track have the chance to transfer to general senior secondary schools. That means substantially intensified competition for high-quality tertiary education among students in the general education track. Second, the one-way student flow in GVEI further lowers the social recognition of vocational education. In the minds of the public, general and vocational education are two ranks of education instead of two categories of education. Only less academically successful students apply for vocational schools, resulting in severe discrimination against vocational education in society (17). When GVEI turns out to be a one-way process of vocational students flowing to the general track, it delivers an explicit message that vocational education is a secondary alternative, inferior to general education, rather than a path with its own value and advantages (18). It also strengthens the stereotypical image of vocational education as being low-quality and less productive (19). This stereotype about vocational education is not only biased but also detrimental to its development. Third, the skewed GVEI compromises the role of vocational education. The primary objective of vocational education is to cultivate workforces competent in technical skills and practical manipulation to meet the demands of a wide range of industries (20). The irrational rush of vocational students to the general education track severely undermines the functions of vocational education. The core value of vocational education lies in its emphasis on the combination of theoretical knowledge and practical skills (21). By turning to general education, vocational students forgo the opportunities to apply the vocational training they received to practical work, which is a waste of time and energy. A chief role of vocational education is to provide a skilled workforce that pertains to the needs of the labor market. This service function is challenged when increased numbers of students opt to quit vocational education. In addition, the established vocational education resources risk being underexploited when there are inadequate student sources (22). All these factors could potentially weaken the role of vocational education in upgrading the technical power of the state and advancing its economic development.

Causes underlying the Issue of One-Way Student Flow in GVEI

Cultural Prejudices against Vocational Education

The perceptions that theoretical knowledge is more important than practical skills and that general education is superior to vocational education are pervasive in Chinese society. They have their roots in Chinese culture. Historically, the chief role of education in traditional China, an agriculture-dominated country, was to train political and cultural elites for the ruling class, with
the maintenance and transmission of their political and economic status being its paramount goal. Such elite-centered education inevitably focused on classical expertise, cultural competence, and political training, undervaluing practical skills (22). In the modern age, general education in China inherited the role of the reproduction of elites, and vocational education has long been excluded from mainstream education (23). As industrialization advanced in China, the importance of vocational education grew. Nevertheless, there remains a general public perception that vocational education is inferior to general education. In the current education system, Gaokao, as a highly selective exam, largely strengthens the social bias that academic knowledge outweighs practical competence.

The social undervaluation of technical skills weakens the attraction of vocation education. Higher academic degrees are seen as signs of superior social status and personal capabilities, whereas vocational education is regarded as an educational path with lower standards of education and limited prospects for future development (24). The public preference for the general education track shows a growing trend in recent years. According to data released by the Ministry of Education of China, the enrollments of vocational schools represented only 33% of the total number of senior secondary education students in 2022, a decrease of 6.96% compared to 2020; the GVR in 2022 was 2.03:1 (25).

Furthermore, social biases against vocational education hinder the implementation and popularization of GVEI in its real sense. GVEI, as an innovative educational paradigm, is intended to scientifically combine general and vocational education to provide a more comprehensive and practical education to students (11). However, many of them worry that to implement GVEI, they must learn vocational courses in addition to the present curriculum, which might negatively affect their academic results and consequently compromise the prospects of their school progression. This concern makes it difficult for the advanced notion of GVEI to be widely accepted and successfully executed.

Additionally, a diversity-valued society necessitates a wide variety of talents for societal advancement at large (21). However, in a social environment full of misperceptions of vocational education, numerous students forgo personal interests and aspirations to pursue higher academic qualifications that might not align with their dispositions and abilities (26). Practical skills and technical competences that vocational education focuses on have special value in economic development. The skewed pursuit of degree-oriented education may lead to a mismatch between the labor supply and demand, resulting in shortages of talent in certain sectors but an oversupply of workforce in others.

**Low Quality Standards in Secondary Vocational Education**

There exists a big gap in the development level between general and vocational education due to the less attention paid to the latter by society (27). Low-quality standards of vocational education are a major reason for the biased student flow towards the general track in GVEI practice. Among the inadequacies in vocational education is the insufficiently competent teaching staff. With the lack of qualified, industrially experienced teachers, there is no guarantee for the quality of specialty-specific instruction, and as a result, vocational education students have no chance to build adequate industrial knowledge and skills (28). Moreover, a portion of vocational education teachers adhere to rigid and monotonous teaching methods, substantially lessening the learning engagement and outcomes of students (27). Furthermore, the lack of high-quality teaching facilities and hands-on opportunities is also a serious issue in current vocational education. As per information from the Ministry of Education of China, the financial investment in secondary vocational education accounts for about one-third of the total expenditure on senior secondary education, far lower than that in general education (29). The inadequacy of investment results in poor teaching equipment, which severely degrades the teaching quality and students’ learning efficacy in vocational education. For instance, in the machining laboratories of some secondary vocational schools, there are only a small number of outdated machine tools, far from being sufficient for students’ mastery of modern mechanical processing technology (29).

The disconnection between vocational teaching materials and market demand is also a notable factor in students’ inclination towards general education. A large portion of vocational education courses and teaching materials no longer cater to the transformed industry and changed market (30). As a result of technological advancement and the emergence of new industries, the market requirements for job skills may have undergone significant changes. However, some vocational schools fail to make timely adjustments to their curricula, resulting in a large gap between the knowledge and skills learned by students in schools and actual requirements in the workplace. When the graduate discovers their training at the vocational school is not helpful in finding them a job that matches their specialty, they and their parents naturally begin to doubt the usefulness of vocational courses (31). The adverse reputation of vocational education like this will affect other students’ choice of education track. At the same time, businesses may encounter a decline in productivity because of the difficulties in recruiting employees with appropriate prior training (32). Issues like these all contribute to further strengthening the negative impression of vocational education in the public and intensifying students’ tendency to move to the general track in the process of GVEI.

**Undesirable Employment Prospects of Vocational School Graduates**

The one-way student flow in GVEI at the secondary level also relates to the labor market’s discrimination against vocational education. Vocational school and college graduates have difficulties securing ideal employment. Higher levels of education are typically a prerequisite for high status employment, which places vocational students in a distinct disadvantage in terms of employment opportunities, compared to their general education peers (33). Currently, the majority of vocational school and college graduates find employment in the secondary labor market, where jobs are often labeled as low-paid and low-status, sending negative messages about vocational education to society (34). Despite recent survey data showing rising employment rates
among vocational students, there is the issue of hidden unemployment among them from the perspective of employment-education background fitness. In 2019, for example, the proportion of vocational students seeking jobs outside the industry related to their training background was as high as 91.75%, and that of those applying for jobs irrelevant to their specialties was 72.90% (35).

The bias against vocational students in the labor market is partly due to the underestimation of the value of vocational education, which, in the eyes of many people, is specialized training for underperforming adolescents (36). In fact, vocational education plays an irreplaceable role in cultivating technically focused talents, who, compared to general education graduates, have received systematic vocational skills training. Rich in practical abilities, they are potentially an essential workforce in the labor market. Nevertheless, because of the chronic stereotype about vocational education in China, many Chinese businesses prefer to recruit graduates from general education institutions to about vocational education in China, many Chinese businesses prefer to recruit graduates from general education institutions to those with a vocational education background. The pervasive dearth of confidence in vocational school graduates deteriorates their employment quality and constrains their career development, consequently motivating vocational students to leave the vocational track (37).

Conclusion
To achieve two-way student flow in GVEI and meet students’ needs for diverse education categories, it is imperative to enhance the quality of vocational education by improving the teaching staff supply, upgrading teaching facilities for better practical experiences of students, and optimizing curriculum design through concerted efforts of the government, schools, and communities. It is also necessary to heighten social recognition of vocational education and social awareness of its importance for national development through actions such as specialized publicity. Reaching the genuine integration of general and vocational education is of vital significance for the development of a pool of talent with both solid knowledge foundations and practical skills and the production of high-quality human resources for the healthy and sustainable socioeconomic development of China.

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