

Realistic Examination of China's Policy of "Roughly Equal General Employment Ratio"

Chenghui Zhang

Public Management, School of Finance and public administration, Anhui University of Finance and Economics, Bengbu, 233030, China

Abstract

In recent decades, China has always insisted that the enrollment scale of general education in senior high school is roughly the same as that of secondary vocational education. However, combined with the current situation of the development of secondary vocational education in China, the policy is difficult to cultivate junior and intermediate skilled talents to meet the needs of social and economic development. On the contrary, it violates the educational ethics of "educational justice", intensifies the enrollment competition and examination oriented education, and affects the sustainable development of students. At present, China should improve the quality of secondary vocational education, postpone the diversion of general vocational education to high school education, reasonably divide the proportion of general vocational education according to local conditions, open up the channels of general vocational accommodation, and give secondary vocational students more development space.

Keywords

High School Education; General Duty Ratio; General Vocational Diversion.

1. Introduction

Since 1983, China has been implementing the policy of keeping the enrollment scale of general education and vocational education in senior high school roughly the same. On the one hand, over the past 40 years of reform and opening up, China's economic level has been greatly improved and its industrial structure has been continuously optimized. At present, China has developed into the second largest economy in the world, and the demand for junior and intermediate technical skilled talents has increased significantly. On the other hand, China's higher education is becoming more and more popular, and the enrollment of higher vocational education is also greatly expanded. People's desire for higher education is becoming stronger and stronger. Under this double impact, it has had a great impact on the school running and enrollment of secondary vocational education. The living space of secondary vocational education is becoming narrower and narrower. People have increasingly heated discussions on whether the proportion of general vocational education needs to remain roughly the same. Facing the current new form and the need of building a modern vocational education system, secondary vocational education, as a type of education different from ordinary high school education, China needs to re-examine the implementation of the policy of "roughly equal general vocational ratio".

2. Development Status of General Vocational Education in Senior High School in China

2.1. Current Situation of Enrollment in Senior High Schools and Secondary Vocational Schools

Table 1. Enrollment of senior high school education in China (10000 people) and general vocational ratio from 2000 to 2019

Year (year)	Enrollment in Pugao	Number of secondary vocational school enrollment	General duty ratio
2000	472.70	333.36	1.42:1
2001	558.00	399.94	1.4:1
2002	676.70	473.55	1.43:1
2003	752.13	515.75	1.46:1
2004	821.51	566.20	1.45:1
2005	877.31	655.66	1.34:1
2006	871.21	747.82	1.16:1
2007	840.16	810.24	1.04:1
2008	837.00	812.11	1.03:1
2009	830.34	868.52	0.96:1
2010	836.24	870.42	0.96:1
2011	850.78	813.87	1.05:1
2012	844.61	754.13	1.12:1
2013	822.70	674.76	1.22:1
2014	796.60	619.76	1.29:1
2015	796.61	601.25	1.32:1
2016	892.92	593.34	1.5:1
2017	800.05	582.43	1.37:1
2018	792.72	557.05	1.42:1
2019	839.37	600.37	1.40:1

The data comes from China Education Statistics Yearbook (2001-2020)

In terms of enrollment at the stage of high school education, in 2000, the enrollment of ordinary high schools in China was 4.727 million, that of secondary vocational schools was 333.36, and the general vocational ratio of enrollment was 1.42:1; In 2019, the enrollment of ordinary high schools in China was 8.3937 million, and the enrollment of secondary vocational schools was 6 million 37 people, and the ratio of general to professional enrollment is 1.40:1. It can be seen that from 2000 to 2019, the enrollment of secondary vocational education and ordinary high schools increased significantly, including 3666700 enrollment of ordinary high schools and 2670100 enrollment of secondary vocational schools; At the same time, the general employment ratio has shown an inverted "U" development trend in these two decades. According to the data in Table 1, it can be found that only in 2009 and 2010, the enrollment of secondary vocational education exceeded that of ordinary high schools. From 2000 to 2008, due to the stimulation of free enrollment for everyone and agriculture related majors in the secondary vocational education policy, the enrollment scale of secondary vocational education once came out of the trough (Xu Guiting, 2016). However, since this period, people's recognition of secondary vocational education has gradually decreased, and people's understanding of secondary vocational education has also undergone earth shaking changes. After the outbreak

of the economic crisis, in order to meet the skilled talents needed for economic recovery, promote the reemployment of workers forced to be laid off in the economic crisis, and increase the technical training of migrant workers, the enrollment of technical schools and secondary adult professional schools in China has increased. During this period, China's secondary vocational education developed rapidly, and the number of enrollment accounted for more than half of the total enrollment of senior high school education. After 2010, on the one hand, due to China's economic transformation and development and the popularization of higher education, the enrollment of ordinary high schools has been promoted, and the enrollment of secondary vocational schools has been limited.

2.2. Current Situation of Teacher Ratio between Ordinary High School and Secondary Vocational School Students in Senior High School

Table 2. Teacher to teacher ratio of ordinary high school and secondary vocational students in Senior High School

Year (year)	Ordinary high school (10000 people)			Secondary vocational education (10000 people)		
	Number of students	Number of Teachers	Student teacher ratio	Number of students	Number of Teachers	Student teacher ratio
2000	1201.3	75.69	15.87:1	1229.5	64.71	19.09:1
2001	1405	84	16.73:1	1170.3	58.78	19.91:1
2002	1683.8	94.6	17.8:1	1172.5	53.39	21.96:1
2003	1964.8	107.66	18.35:1	1254.6	68.6	25.3:1
2004	2220.4	119.07	18.65:1	1409.2	70.85	28.13:1
2005	2409.1	129.95	18.54:1	1600	74.98	31.02:1
2006	2514.5	138.72	18.13:1	1809.9	79.91	31.67:1
2007	2522.4	144.31	17.48:1	1987	85.89	31.39:1
2008	2476.3	147.55	16.78:1	2056.7	89.49	31.27:1
2009	2434.3	149.33	16.3:1	2194.1	86.86	25.27:1
2010	2427.3	151.82	15.99:1	2237.4	87.05	25.69:1
2011	2454.8	155.68	15.77:1	2204.3	88.19	24.97:1
2012	2467.2	159.5	15.47:1	2112.7	88.1	24.19:1
2013	2435.9	162.9	14.95:1	1923	86.79	22.64:1
2014	2400.5	166.27	14.44:1	1755.3	85.84	21.34:1
2015	2374.4	169.54	14.01:1	1656.7	84.41	20.47:1
2016	2366.6	173.35	13.65:1	1599	83.96	19.68:1
2017	2374.6	177.4	13.39:1	1592.5	83.92	19.59:1
2018	2375.4	181.26	13.1:1	1555.3	83.35	19.1:1

The data comes from China Education Statistics Yearbook (2001-2019)

In addition to meeting the hardware facilities necessary for the development of secondary vocational education, the most important thing is to ensure sufficient teachers. Meeting the requirements of software facilities is the core driving force to improve education. Table 2 reflects the number of students and full-time teachers in ordinary high schools and secondary vocational schools in China. It can be seen from table 2 that since 2000, the number of students in ordinary high schools and secondary vocational schools in China has experienced a change trend of first increasing and then decreasing; From the change trend of the number of full-time teachers, the number of full-time teachers in senior high schools has increased year by year in recent 20 years, while the number of full-time teachers in secondary vocational education still shows the change of first increasing and then decreasing. From the perspective of student teacher ratio, the student teacher ratio of ordinary high school in the same year is much lower

than that of secondary vocational education. The student teacher ratio of ordinary high school is the highest 18.65:1 and the lowest 13.1:1. The student teacher ratio of secondary vocational education is the highest 31.67:1 and the lowest 19.09:1. It can be seen that the lowest student teacher ratio of secondary vocational education is higher than that of ordinary high school. China's secondary vocational education is relatively high, and there is a serious lack of full-time teachers in secondary vocational education. Secondary vocational education is the same as education in senior high school. In addition to professional teachers who are proficient in technology, secondary vocational education, like ordinary senior high school education, also needs to cultivate students' basic scientific and cultural literacy, so it also needs teachers who teach students science and culture. Under this actual demand, the existing teachers of secondary vocational education are far from meeting the basic requirements of the development of secondary vocational education. Therefore, when the soft power of secondary vocational education is far from enough, if we still insist on expanding the enrollment scale, it will inevitably lead to the gradual reduction of the quality of secondary vocational education, which is more different from the educational quality level of general and high schools, which is contrary to educational equity, let alone cultivating junior and intermediate technical talents required for social and economic development.

2.3. Current Situation of Funds for General High School and Secondary Vocational Education in Senior High School

Table 3. Average education expenditure of senior high school students and secondary vocational students in China from 2000 to 2019 (unit: yuan)

Year (year)	Ordinary high school	Secondary occupation	Year (year)	Ordinary high school	Secondary occupation
2000	1749.43	1404.94	2009	6581.92	4782.11
2001	1930.22	1492.67	2010	7330.96	5358.31
2002	2072.77	2136.78	2011	8160.93	6157.56
2003	2191.01	2066.05	2012	10110.09	7755.49
2004	4091.06	1881.05	2013	13244.67	10389.34
2005	4514.57	1694.51	2014	13990.99	10861.50
2006	4906.28	1672.24	2015	15281.05	12903.97
2007	5524.52	4286.86	2016	16615.87	13901.81
2008	5627.37	4533.05	2017	18183.07	14569.21
			2018	19889.16	15844.02

The data comes from the "China Education Statistics Yearbook" and the statistical announcement of education funds

Adequate education funds are the basis for the development of education. In the past two decades, China has gradually increased its investment in high school education. The average education funds for ordinary high school students have increased from 1749.43 yuan in 2000 to 19889.16 yuan in 2018, and the funds for secondary vocational education have increased from 1404.94 yuan in 2000 to 15844.02 yuan in 2020. It can be seen from table 3 that over the years, the average education expenditure of senior high school students is higher than that of secondary vocational education students. The research of the world bank in the 1990s has shown that the average student cost of vocational education should be 2.53 times that of general education at the same level [1]. Generally speaking, the higher the training cost, the more education funds should be invested. In addition, the education funds of secondary vocational education mainly come from the national financial education funds. In order to develop secondary vocational education, we should first increase the national financial

investment. Therefore, if the policy of "general vocational ratio is roughly equal" is implemented to realize the 1:1 diversion of general vocational education, China's investment in secondary vocational education should be higher than that of ordinary high schools. But in fact, not only the investment in secondary vocational education is not higher than that in general education, the same investment has not been achieved, and even the awareness of paying equal attention to secondary vocational education is lacking.

3. The Negative Effects of the Policy of "Roughly Equal General Employment Ratio" in Senior High School

3.1. The Utilitarian Nature of the Policy of "The Ratio of General Education to Vocational Education is Roughly the Same" Ignores the Sustainable Development of Students

The policy of "the ratio of general education to vocational education is roughly equal" reflects that instrumental rationality is its main value orientation and has certain utilitarianism. The main educational task of secondary vocational education is to cultivate students' "skills", that is, to obtain vocational skills (Wang Jiaona, 2015). Its functional orientation is to serve social and economic development and cultivate the needs of junior and intermediate skilled talents to meet the needs of economic development. However, the policy of "roughly equal general vocational ratio" compulsorily arranges nearly half of the students to receive vocational education only based on one examination score, ignoring the improvement of students' basic scientific and cultural literacy in the secondary education stage, which is not conducive to the sustainable development of students. The construction of modern vocational education system makes it more clear that secondary vocational education should not only teach skill education of material production behavior, but also pay close attention to people's spiritual needs and promote the all-round development of individuals (Chen Peng, 2021). The fundamental starting point and ultimate destination of education is to cultivate people with complete and all-round development. The long-term and in-depth nature of general education is an important factor in promoting people's all-round and sustainable development. The longer people receive general education, the more broad-based and adaptable they are. They can not only deal with specific affairs in various professional fields with comprehensive quality, but also accurately grasp the true direction and development trend of social practice (Dai Ruihua and Liang Qian, 2018). In the face of social mobility and economic development, secondary vocational education, due to its single curriculum, cultivates middle and primary skilled talents who lack certain scientific and cultural literacy, which has a weak foundation and few opportunities to continue to flow to the upper class of the society; In addition, the limitations of technical skills lead to the decline of adaptability and migration ability in the process of career development, which brings new unemployment risks, which is not conducive to the lifelong sustainable development of students.

3.2. The Policy of "Roughly Equal Ratio of General Education to Vocational Education" Violates the Policy Ethics of "Educational Justice"

"Educational justice" means that all students who need and desire education can enjoy equal educational opportunities and resources within the country, regardless of region, nationality, race, gender, urban and rural areas, rich and poor, physical and mental conditions. From the effect of China's implementation of the policy of "general vocational ratio is roughly the same" over the years, the diversion of general vocational education after the high school entrance examination occurs more in rural areas and economically underdeveloped areas, and most of the students in secondary vocational education come from rural and underdeveloped areas. In fact, this is an unfair phenomenon of education. In addition, education has internal and external

justice, which is the justice of institutional arrangement. The main measure to realize the "general vocational ratio is roughly the same" in China is to forcibly divert the students who rank in the lower half to secondary vocational schools through the high school entrance examination. Based on the basic national conditions of China with large differences between urban and rural areas and significant social strata, this compulsory diversion shows a clear dual value orientation. This arrangement seems to be a system specially set up for the children of lower social strata in rural and economically underdeveloped areas, The system of "roughly equal proportion of general posts" under the diversion of general posts is also a mechanism to copy and expand social strata (Liu Xiao and Liu wankun, 2019). In China, the right of students to receive secondary education is generally equal to that of the UK and the US, which is also ignored on the basis of the state's "equal right to receive secondary education" of Wang Dexia and Danxia, It violates the policy ethics of "educational justice".

3.3. The Policy of "Roughly Equal General Employment Ratio" Intensifies the Competition for Examination Oriented Education and Further Education

The diversion after junior high school makes some students enter senior high school and have the opportunity to enter the University, while others enter secondary vocational colleges and universities. In the context of the social environment, social competition is becoming more and more intense, the pressure of survival is increasing, and the desire to improve the social class and economic income level is becoming stronger and stronger. Education is one of the important ways to block the intergenerational transmission of education and cross social classes, resulting in the fierce competition for high-quality educational resources. In particular, on the one hand, with the implementation of the policy of "the ratio of general education to vocational education is roughly the same", on the other hand, in the context of the popularization of higher education, parents and children are more eager to enter high school, and more than half of them, especially key high schools, hope to enter university. Under the dual influence of the two, the enrollment competition will undoubtedly drop to junior middle school and even primary school. The increased pressure of enrollment competition will inevitably aggravate exam oriented education. In order to enable their children to enter high school, many parents attach great importance and tension to their children's education, and some parents are also deeply afraid. Now more and more primary school students have been fully arranged by various counseling institutions. All the time and energy of students are used to study to cope with the entrance examination. Children's independent space is less and less, some or even none. The occurrence of these phenomena can actually show that many parents do not agree with the policy of "general vocational ratio is roughly the same", and they can not change this policy. They can only make their children study harder and will not be eliminated to secondary vocational schools.

4. Rational Thinking on Adjusting the Relationship between General Education and Vocational Education in Senior High School in China

4.1. Postpone the Diversion of General Vocational Education to the Senior High School Stage and Improve the Quality of Secondary Vocational Education

It is also because secondary vocational education is more and more difficult to meet the requirements of the development of the times. From the perspective of educational theory and international trend, the diversion of general vocational education should be delayed and gradually form a natural diversion form based on students' autonomy and voluntariness. The postponement of general vocational diversion not only reflects the educational policy of people's all-round development, but also meets the requirements of economic development for the continuous improvement of talents, but also is conducive to the sustainable development

of students in their long career in the future (Zhu Xinzhuo and Zhao Kuankuan, 2020). Vocational education can be infiltrated into the general education of senior high school and even primary school, so as to guide students to have a correct outlook on career, help students understand vocational knowledge in advance, so that they can have a clear understanding in the general vocational diversion after senior high school, choose their own major and learn technical skills. After the general vocational diversion is postponed to the high school stage, it is also an opportunity for those backward students who have poor grades in junior middle school and can rise up in the high school education stage. In addition, continuously improve the teaching quality of secondary vocational schools, establish standards for evaluating the teaching and training quality of secondary vocational education, and appropriately reduce the number of secondary vocational schools that do not meet the standards. Such decentralized education investment can be relatively concentrated, which will help to enhance the competitiveness and attractiveness of secondary vocational schools.

4.2. The "General Employment Ratio" Cannot be Unified Across the Country, and All Localities should be Allowed to Reasonably Divide the Proportion According to Local Conditions

At present, we should break the unified regulation that the scale of general education and secondary vocational education at the stage of secondary education is roughly the same, which should be different in different regions and industries. Due to the great differences in the level of economic development, industrial structure and other aspects in various regions of China, there are also great differences in the demand for junior and intermediate skilled talents and the development of secondary vocational education. Some industries in some regions may need a large number of junior and intermediate skilled talents. Therefore, it is necessary to train junior and intermediate skilled talents appropriately, but it does not mean that China should fully realize the "general employment ratio is roughly the same". This policy lacks certain pertinence and even unpopular, resulting in great difficulties in implementation. Therefore, the compulsory and unified national policy of "roughly equal general employment ratio" should be abolished, and each region should independently determine the general employment ratio according to the needs of local economic development, the law of education and the supply of education. For example, in regions with relatively high levels of industrialization and science and technology, the scale of general education should be higher than that of vocational education; In areas with relatively low industrialization and technological level, the scale of general education can be lower than that of vocational education or equivalent (Zhu Xinzhuo and Chen Junyi, 2013).

4.3. From the Perspective of Lifelong Education, Establish the Educational System and Mechanism of General Vocational Accommodation

Compared with other typical general vocational diversion modes, the general vocational diversion mode in China is relatively single. Generally speaking, the general vocational education diversion is a two-stage inter school diversion mode, that is, two inter school diversion modes after junior middle school (after nine-year compulsory education) and three years after senior high school (Zhao Jie, 2013). In these two diversions, China's general high schools and vocational schools have been in a state of two tracks in parallel, which are neither interlinked nor crossed. This single diversion mode in China obviously lacks certain flexibility and adaptability. It is difficult to meet the requirements of increasingly complex social division of labor and the needs of diversified development of talents. Therefore, it is necessary to construct the educational system and mechanism of general vocational integration. China's high school education should come out of the state of division between general education and vocational education, establish a bridge of mutual integration and connection between general education and vocational education, provide students with a variety of choices, and even make

free choices for many times between general education and vocational education, so that students can be divided voluntarily and naturally. At the same time, opening up the channels for secondary vocational students to enter higher vocational and higher education and giving secondary vocational students more development space is conducive to the overall construction of modern vocational education system and the improvement of social fair and rational thinking on the choice of further education.

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