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## **Making Education Reform Happen:**

### **Removal of Education Bubble through Education Diversification**

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# **Making Education Reform Happen: Removal of Education Bubble through Education Diversification\***

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# **Making Education Reform Happen**

## **Removal of Education Bubble through Education Diversification**

Ju-Ho Lee

### **Abstract**

During the period from 2008 to 2013, Korea pushed ahead with education diversification reforms to overcome the education bubble which immensely increased private tutoring expenditure and produced college graduates receiving lower wages than high school graduates. Private tutoring expenditure declined after 2010 and the college advancement rate also declined by more than 12 percent points from 2008 to 2012. I demonstrate that for countries like Korea, where excessive focus on cognitive skills led to the formation of the education bubble, it is important to improve the quality of education institutions that emphasize non-cognitive skills through education diversification. I show that Korean education reform focused on policies designed to reinforce horizontal differentiation and actively lessen the financial burden of education expenditure, along with other education reform policies usually stressed by other countries to enhance the quality of education. I also show that major strategies for overcoming political economic obstacles pertaining to education diversification reform were opening-up strategies that opened education to industry, parents, new players, countries abroad, and other ministries, together with crisis-management strategies that transformed not only the overall sense of crisis among parents and the public but also incidences of small crises into significant reform opportunities.

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## 1. Introduction

Amid globalization and knowledge-based economy, many countries have given higher priority to education reforms. However, when it comes to specific goals, policy agenda, and strategies regarding education reform, consensus among countries have yet to be formed. For example, Korea strongly focused on lowering the college advancement rate and reducing the burdens of tests on students while improving the test scores of students in secondary and primary schools and increasing college enrollment rates are major goals of the US and the UK. It may even appear as though Korea's education reform is headed in the opposite direction as those of the US and the UK.

In Korea, "education bubble", that is defined as persistent increases in educational expenditures which do not contribute to human capital accumulation, formed since 1990s when consistent increase in demand for education has enlarged the size of the private tutoring to near that of the public education, and has led to increases in low-quality colleges with their graduates receiving wages lower than high school graduates (Lee, Jeong, and Hong, 2014). Korea's education bubble is the result of the quantity expansion of education derived from consistent demand for education amid low improvement in quality and weak horizontal differentiation among schools and colleges.

In the US, low-quality schools (particularly public schools in low-income areas) have not been able to increase the quantity of qualified students for college advancement, despite technological advancement leading to a rise in demand for college graduates. The essential problems faced by Korea and the US might not be very different because they commonly rooted in the inability of education to keep up with the rapid pace of technological advancement (Goldin

and Katz, 2008). However, other countries can be misguided by Korea's experience when they benchmark Korean education based on simple international comparisons of quantitative measures, such as average years of schooling and PISA test scores, because these quantitative measures mask a considerable amount of the education bubble.

During the period from 2008 to 2013, Lee Myung-Bak administration pushed ahead with education reforms aiming at removing the education bubble through education diversification<sup>1</sup>. Private tutoring expenditure, which had continuously increased to nearly reach the size of public education, declined after 2010 and the college advancement rate, which went from 33.3 percent in 1990 up to 83.9 percent in 2008, declined to 71.5 percent in 2012 (Lee, Jeong, and Hong, 2014). There are clear evidences of the reduction of the education bubble during and after reform period, but how much of it was actually due to the education diversification reform remains to be verified by further research. Nonetheless, gaining an understanding of the education diversification reform is an important step to approaching the policy measures to counter education bubbles.

The specific goals, policy agendas, and reform strategies for education diversification in Korea might also have abundance of implications for other countries given the considerable degree of its education bubble and the comprehensive efforts for its education reform. For an increasing number of countries, signs of the education bubble are being noticed through the expansion of the private tutoring and an increasing number of low-quality college graduates not being able to obtain desirable career opportunities in the labor market. Therefore, understanding

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<sup>1</sup> The author of this paper was in charge of drafting the presidential election pledge on education reform for then presidential candidate Lee Myung-Bak in 2007 as a member of the National Assembly, and drafting the blueprint for education reform as Senior Secretary to the President for Education, Science and Culture when the Lee Myung-Bak administration came into office in 2008, and afterwards pursued coherent reforms for education diversification as the Vice Minister of the Ministry of Education, Science and Technology from March 2009 for one year and a half, and then as the Minister from August 2010 for two years and a half.

what actually happened from 2008 to 2013 in Korean education reforms is important for experts and policy makers not only in Korea but also around the world

The paper is organized as follows. Section 2 discusses education diversification as a goal of education reform to remove the education bubble. Section 3 discusses specific reform agendas for implementing education diversification. Section 4 discusses reform strategies for implementing education diversification. Section 5 concludes.

## **2. Education Bubble and Education Diversification**

During the education bubble period from 1990 to 2009, there were drastic increases in private tutoring and the college advancement rate while the competitiveness of schools of vocational and technical education weakened and vertical differentiation among colleges became stronger (Lee, Jeong, and Hong, 2014). In other words, while the overall quality of education failed to make meaningful improvements, the quality gap between general high schools and 4-year colleges on the one hand and vocational high schools and 2-year technical colleges on the other, widened significantly. On top of this, primary and secondary schools focused on cognitive skills to the exclusion of non-cognitive skills like vocational and character skills through rote learning and quantitative evaluation that are geared to college entrance exams. In addition, 4-year colleges other than major research universities are failing to achieve horizontal differentiation through industry-college cooperation or specializing in teaching.

Such strict vertical differentiation among colleges with major research universities at its peak has reinforced intense competition among students to obtain a higher test score by even the slightest margin in order to enter colleges that have higher average admissions test scores. This has led to the education bubble, where immense investment in education fails to increase the

level of human capital, and private tutoring expands enormously amid consistent indiscriminate entrance into low-quality colleges. Therefore, education diversification to eliminate the education bubble aims to enhance the quality of schools and colleges while invigorating diverse schools and colleges to focus on not only cognitive skills but also non-cognitive skills such as vocational skills, character skills, and creativity.

Figure 1 displays the conceptual framework on the direction of education reform to foster education diversification. The horizontal axis represents the degree of focus put on cognitive skills by Korean schools and colleges, and the vertical axis represents their level of quality. The dots on the two-dimensional sphere conceptually represent each of the schools and colleges in Korea. Before education diversification, the quality level of general high schools and 4-year colleges that focus on cognitive skills is higher, compared to vocational high schools and 2-year technical colleges, schools that emphasize character skills, or colleges specializing in industry-academia cooperation. As shown in Figure 1, education diversification enhances the overall quality of schools and colleges while putting particular emphasis on improving quality of schools and colleges that focus on vocational skills, character skills, and creativity.

Diverse spectrums of policies were suggested to remove the education bubble and opposing views clashed and went through serious debate. The policy that competed most intensely with education diversification was education equalization policy. Proponents of education equalization argue that the fastest way to remove the education bubble is to eliminate difference in quality among colleges and schools through active government intervention and control.

In Korea, the equalization policy was first implemented on Seoul middle schools in 1969, and was expanded to high schools in Seoul and large cities in 1974. It is true that the policy



contributed to rapid expansion of education. However, during this process, all private schools became locked into the uniform regulations that bound public schools. Rather than allowing school choices for private schools, the government took charge of personnel and operation fees through provision of fiscal subsidies for all private schools. Furthermore, even college equalization policy was suggested as a quick fix to solve the problem of vertical differentiation among colleges. However, the policy was not chosen as it was deemed unfit to meet society and students' diverse demands and concerns arose over it lowering the quality of higher education and reinforcing the growth of the education bubble.

Although education equalization could eliminate difference in quality among colleges, it would lead to the decline in overall quality and horizontal differentiation of education (Lee and Woo, 1998; Lee, 2004). Therefore, as seen in Figure 2, education equalization would lead the dispersion of schools and colleges to become concentrated at low levels.

The difference between education diversification and equalization is displayed in Figure 3 based on the conceptual framework of the two types of human skills in society suggested by Lee and Woo (1998). We can draw a production possibility curve by assuming a country simply with two types of human skills, cognitive skills and non-cognitive skills. As seen in the Figure 3, Korea locates in a point that tilts toward cognitive skills because of the focus of Korean education on cognitive skills that can be measured by tests. In addition, as the considerable amount of education investment does not lead to human capital accumulation, the current location of Korea is inside the production possibility curve. Both education equalization and education differentiation could lead to a point with more non-cognitive skills. However, by lowering the quality of education and weakening horizontal differentiation, education equalization carries the danger of placing Korea further away from the production possibility

curve with much lower cognitive skills. On the other hand, education diversification can greatly increase non-cognitive skills without sacrificing cognitive skills, and lead Korea to be located as closely as possible to the optimal point on the production possibility curve.

The two different approaches – equalization and diversification – clashed with each other particularly on the issue of school choice of private schools. The education reform in 2008 implemented an autonomous private high school system under the frame of ‘High School Diversification 300’. Following the final decision of each municipality’s Office of Education, around fifty private high schools withdrew financial support from the state in return for expansion of autonomy particularly in student selection. However, this initiative is still under great debate. Policymakers against autonomous private high schools argued that this policy can strengthen vertical differentiation among high schools. On the other hand, policymakers in favor of autonomous private high schools argued that vertical differentiation among high schools already exists due to special-purpose high schools such as foreign language high schools and science high schools, and that this policy would not only relieve vertical differentiation, but would help strengthen horizontal differentiation by making those private schools more autonomous.

Regarding policies for reducing the burden of college tuition, again the approaches of education equalization and diversification competed with each other. Proponents of equalization suggested lowering the college tuition rate itself while implementing a uniform financial support system for all colleges. On the other hand, supporters of diversification proposed lowering the tuition burden on households without sacrificing university autonomy through policies including expansion of the national scholarship system, implementation of the Income Contingent Loan (ICL), and the introduction of exit mechanisms for failing colleges. Eventually, the

diversification approach designed to lower the burden of college tuition was agreed upon and implemented.

The conceptual framework provided in this paper is not only useful for comparing the equalization and diversification approaches, but also have important implications for international comparisons of education reform. In Figure 4, the difference in the total quantities of human skills among countries has been standardized and the relative proportional differences are shown. If the US benchmarks Korean education after merely observing Korean students' high test scores, rather than heading in the optimal direction, the US education will end up reducing the non-cognitive skills of students. Similarly, if Korea attempts to indiscriminately implement the US education system, Korea may head in the wrong direction and only reduce cognitive skills. The recent debate arising in Japan over '*Yutori* Education' ("room to grow" education) can be understood in the same context. Japan's drastic reduction of the education burden of its education curriculum in 2002 can be viewed as using the US education as a benchmark for reform. However, after Japanese students' scores fell in recent PISA tests, the education policy direction has reversed its course of pursuing *Yutori* Education (Takayama, 2007). Rather than pursuing both cognitive and non-cognitive skills together through fundamental changes in teaching and evaluation methods of teachers in the classrooms (Elias, 2009), the problem with Japan might be its sole emphasis on non-cognitive skills building only.

This chapter showed how important it is to consider both cognitive skills and non-cognitive skills for the direction of education policy. In particular, it is important for countries like Korea, in which excessive emphasis on only cognitive skills has led to a large education bubble, to enhance the quality of education institutions that emphasize non-cognitive skills through education diversification reform.

### 3. Reform Agenda for Education Diversification

Korea's education diversification reform, conducted during the Lee Myung-Bak administration from 2008 to 2013 <sup>2</sup>, can be classified into three types. As previously discussed, in order to eliminate the education bubble, the direction of the reform was enhancing education quality while fostering horizontal differentiation. Additionally, policies to reduce the financial burden of private tutoring and college tuition that had already exceeded 4 percent of GDP were simultaneously implemented. While enhancing education quality and fostering horizontal differentiation are *ex ante* measures to remove the education bubble, efforts to reduce the private burden of education expenditure are *ex post* measures taken after the bubble has been formed. Reform agenda for education diversification is summarized and presented in Table 1.

The policy direction of the first type of reform is strengthening horizontal differentiation in education. It is impossible to remove the education bubble in Korea without resolving the problem of vertical differentiation in education, which has gotten stronger due to intensified pressure for students beginning in primary school to increase test scores by even the smallest margin in order to enter better and higher ranking colleges. In order to resolve this issue, it is important to strengthen career guidance and vocational and technical education through policies like Meister High Schools, to help students develop their diverse potentials and secure quality jobs upon graduation without having to advance to college. Also, general schools in the secondary level should not only emphasize multiple choice test scores, but change teaching and assessment methods to focus more on students' creativity and character skills. Furthermore, not

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<sup>2</sup> For a detailed description of the education reform measures of the Lee Myung-Bak administration, refer to (Lee et al. ed., 2012).

every higher education institution should aim to become the world's top research university, but focus on specific fields or specialize in teaching or industry-college cooperation. The following policies were implemented to strengthen horizontal differentiation among schools and colleges.

The first item on the reform agenda is the Meister high school policy. Since 2008, the government has annually designated 7 to 10 vocational high schools as Meister high schools and intensively supported them<sup>3</sup>. For designation of Meister high schools, important criteria include guaranteed 100% employment rate of graduates and innovation of curriculum through the cooperation with industry. Financial support for designated schools increased and the government put its best efforts to help secure employment for graduates. Meister high schools played a leading role in reversing the trends of vocational high schools being considered inferior to general high schools and vocational high school graduates choosing college advancement rather than obtaining a job to directly utilize the skills they acquire.<sup>4</sup> Once perceived as problematic schools in the local area, vocational high schools have rapidly transformed into sources of pride in their local communities after designation as Meister high schools.

Second, various policies in addition to Meister high schools were initiated to strengthen career guidance and vocational education. The government supported 350 Specialized High Schools to shift focus away from college advancement to employment. In order to promote “job-first, diploma-later” career path, colleges provided night classes or weekend classes for graduates of Meister high schools and specialized high schools so that students can learn while they work. If students can obtain degrees while working, it can prevent students from blindly advancing to

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<sup>3</sup> As of 2013, among roughly 400 specialized high schools, 50 have been designated as Meister high schools and 35 of them are in operation. The remaining 15 designated schools are in the process of preparing for operation.

<sup>4</sup> After President Park Chung-Hee fostered vocational high schools in order to promote the heavy and chemical industry in 1970s, vocational high schools showed a declining trend after 1990s and even during the education bubble period (Lee and Hong, 2014).

colleges without serious consideration about their career paths and risk being unemployed after graduation. In addition, in order to strengthen career education for elementary and middle school students, the government hired 4,500 career guidance teachers and dispatched them to schools to provide career path consultation for students.

Third, the government carried out policies to develop students' creativity and character skills. To overcome the problem of over-emphasis on multiple choice test scores, including those of the KSAT, the government implemented the Admissions Officer System. When the system was first implemented in 2008, the government directly subsidized the personnel costs for college admissions officers, and as of 2013, 47,600 students, or 13.6% of newly entering college students, were admitted through the Admissions Officer System. The students were evaluated not only on their test scores, but also on various documents and interviews. The number of Admissions Officers in colleges increased from 42 in 2007 to 618 in 2012. For the special-purpose high schools, Admission System for Self-directed Learning<sup>5</sup> was implemented, which is similar to the Admission Officer System. As the problem of school bullying drew public attention, social and emotional learning were stressed in classrooms; physical education class hours were extended in middle schools, and sports clubs and student orchestras increased sharply. For more individualized learning, smart education including digital textbooks was implemented. However, it has been pointed out that such policy changes have not yet led to significant changes in teaching and assessment methods of teachers in classrooms.

Fourth, the government built a system to strengthen the teaching function of colleges. By using major indicators on colleges, which are open to the public through the university

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<sup>5</sup> The Admission System for Self-directed Learning has brought positive effects such as rapid decline in private tutoring expenditure (Lee et al. ed., 2012).

information disclosure system, such as student employment rates after graduation, student retainment rates, full-time faculty rates, scholarship grants, and educational expenses per student, the government implemented a formula funding system to financially support colleges to enhance their capacity of teaching. Also, through the Advancement for College Education (ACE) initiative, the government has helped colleges develop and establish various advanced undergraduate education models. In addition, the Leaders in Industry-University Cooperation (LINC) initiative facilitated key programs such as hands-on experiments, on-site training, internships, and Industry-University contract majors to nurture the proper talents required by industry. The initiative supported the hiring of field specialists as Industry-University partnership professors, the number of which increased up to 2,000 by 2012. 2-year colleges were also selected and supported as World Class College (WCC) to help them develop to the world-class level. Thus, the government supported horizontal differentiation by helping develop colleges with high teaching-orientations or strong partnership with industry.

The policy direction of the second type of reform to remove the education bubble is enhancing the quality of education, and the reform agenda includes policies that are emphasized by the US and other advanced countries, and also widely recommended to developing countries. The autonomy and accountability of schools and colleges, emphasized in the U.S. education reform (Aghion, et al, 2010; Hoxby, 2003), are also useful policy tools for removing the education bubble. Along with enhancing the quality of research universities, weeding out low-quality colleges through university restructuring was equally important on Korea's reform agenda. These policies deserve emphasis even in the absence of education bubbles, but in order to remove them, policies for enhancing education quality should be carried out together with policies for strengthening horizontal differentiation. If only horizontal differentiation is

emphasized without efforts to improve the quality of education, then the quality may equalize downward. The following policies were initiated to improve the quality of education.

First, the government enforced policies to increase the autonomy of schools. Based on the equalization policy framework, high schools in Korea had been managed uniformly despite the diverse needs of students and parents (Lee, 2004). Thus, through the “High School Diversification 300” strategy<sup>6</sup>, autonomous private high schools among private high schools, autonomous public high schools among public high schools, boarding schools among local schools including those of small and medium-sized cities, and Meister High Schools among vocational high schools were designated to expand school choices and enhance autonomy of school management.

In addition, a system of recruiting principals through open competition was implemented for 50% of new principals. Under the Open Recruitment of Principals system, the school deliberation committee composed of parents, teachers, and local experts initially selects candidates. Once the committee recommends the candidates, the principal recruitment board of the local Office of Education performs a second interview before making the final decision to hire new principals for four years. The Open Recruitment of Principals system is expected to contribute to strengthening autonomous leadership of principals, which is the core of school autonomy.

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<sup>6</sup> “High School Diversification 300” strategy was a presidential election pledge by the Lee Myung-Bak administration to enhance students’ right to choose schools and increase autonomy of school operation by selecting 300 high schools among 2159 high schools. Since the inauguration, it was not desirable to be bound by numbers, so the government did not choose exactly 300 schools, but eventually 49 autonomous private high schools, 116 autonomous public high schools, 150 boarding schools (including 12 autonomous public high schools and 22 autonomous private high schools), and 35 Meister High Schools started with more autonomy, totaling 338 schools in 2013.



Second, the government carried out policies to increase the accountability of schools. In 2007, the Education Information Disclosure Act was passed by the National Assembly and important information including the education environment and academic achievement levels of all primary and secondary schools were publicly disclosed through a single system. Also, according to this law, the National Assessment of Educational Achievement (NAEA) was annually conducted on sixth grade, ninth grade, and tenth grade students since 2008, and the distribution of underachieving students by schools were publicly announced. Schools with many underachieving students were selected as “creative management schools” for learning improvement and the government supported them with provision of increased funding or teaching assistants. Accordingly, the ratio of underachieving students largely decreased from 17.4% in 2008 to 6.2% in 2010. Moreover, the Teacher Appraisal for Professional Development (TAPD) system was fully implemented in 2010 after five years of pilot operation, and students, teachers, and peer teachers evaluated every teacher, and the evaluation results were utilized in teacher training programs.

Third, efforts were made to increase the quality of research universities. For Korean research universities to be more autonomous and open, the government enforced the governance reform of national universities by incorporating Seoul National University and replacing direct elections of national university presidents with a search committee system. Moreover, the government supported the invitation of 340 foreign erudite scholars for 30 domestic universities through the World Class University (WCU) initiative.

Furthermore, research funding for faculties in research universities were largely increased, and the share of professors in science and engineering receiving government research grants increased by two-folds from 16% in 2008 to 32% in 2013. Also, the Institute for Basic

Research (IBS) was established through the “International Science Business Belt” initiative, which managed ‘IBS campuses’ in five major universities specialized in science and technology – Korea Advanced Institute of Science & Technology (KAIST), Gwangju Institute of Science and Technology (GIST), Daegu Gyeongbuk Institute of Science and Technology (DGIST), Ulsan Institute of Science and Technology (UNIST), and Pohang University of Science and Technology (POSTECH) – and strengthened support for these universities.

Fourth, the government pushed forward with restructuring of higher education institutions. By using indicators from the university information disclosure system, the University Restructuring Committee (URC) classified colleges with poor conditions and achievements into three categories: restricted from state subsidies, limited from support for student loan programs, and poorly managed. In 2012, 43 colleges were announced as restricted from state subsidies, and they were excluded from qualification to apply for government supported projects, but they could still receive scholarships and research funds which support individuals. Among 43 colleges, 17 colleges with poor educational conditions and achievement were classified as limited from support for student loan programs. Out of 17 colleges, 4 colleges were classified as poorly managed schools after two months of field inspection. Poorly managed colleges were supported with management consultation to stimulate self-directed improvement efforts, but if recovery was determined impossible, colleges were closed down. Through this process, a total of six colleges were closed down in 2012.

Lastly, the policy direction of the third type of education diversification reform is reducing the private burden of educational expenditure; private tutoring expenditure and college tuition expenditure.

First, comprehensive measures were taken to lessen the financial burden of private tutoring. The After School Class was implemented, which is a public education program that supplements regular educational curricular and makes sure that the various demands by parents and students are completely met within the school. The programs are not only provided by school teachers, but also by non-profit organizations and social enterprises that provide education programs at a much lower cost than private tutoring. If the After School Class is operated properly, its programs are expected to replace a majority of private tutoring (Kim, 2011). Also, the government supported local communities and companies to actively participate in Donation for Education (DE) through after-school programs or weekend programs.

After the Constitutional Court ruled that it is against the constitution to ban private tutoring, various efforts to strengthen regulation on private tutoring took place, but were generally ineffective. In 2008 a new approach toward private tutoring appeared. First, local governments passed ordinances which prohibited the operation of private tutoring institutions after 10 p.m., and the National Assembly passed the Private Teaching Institutes Act which stipulated that information about tuition fees must be disclosed on the websites of local Offices of Education and tuition fees must not exceed the registered amount. Also, the public Education Broadcasting System (EBS) provided KSAT courses to satisfy the demands for extra learning for college admission within the domain of the public education system. As the courses are connected with actual KSAT, students do not need to prepare the test through private tutoring institutions or online private tutoring courses.

Next, the government initiated policies to reduce the burden of college tuition by half. Above all, in order to expand the national scholarship system, the government established the Korea Student Aid Foundation (KOSAF) and drastically increased the total annual budget for

national scholarship up to 1.75 billion dollars in 2013. There are largely two types of national scholarship systems. One is the Basic Livelihood Security Grant Program which directly provides scholarships to students based on the levels of family income, and the other type induces colleges to put effort into securing scholarships and lowering tuition by directly funding the colleges that are able to do so. And in 2010, Income Contingent Loan (ICL), a tuition loan program through which students can pay back the tuition loan after they are able to earn enough income, was introduced. Also, the government lowered the interest rates of ICL by using various measures such as issuing promissory notes. Through this system, the government drastically decreased the tuition burden on college students while respecting college's autonomy and diversity. The National Assembly was very active in increasing the budget for the national scholarship and passed a bill to prohibit tuition from increasing more than 1.5 times the average rate of increase of consumer prices during the previous three years.

This section showed that the reform agenda for education diversification include diverse policies designed to reinforce horizontal differentiation and actively lessen the financial burden of education expenditure, along with other policies usually emphasized for education reforms to enhance the quality of education in other countries.

#### **4. Reform Strategy for Education Diversification**

When it comes to education reform, there are many actors with heterogeneous interests who are directly involved, including teachers, students, and parents. Also, policies are difficult to enforce if teachers against reform do not agree with the policy measures, and a long time lag of education reform would be a big burden on political leaders who tend to favor policies with visible short term outcomes. For these reasons education reform is considered to be more difficult than reforms in other areas (Hanusheck, 2002). Such obstacles to education reform eventually prevent institutional changes that can improve the quality and horizontal differentiation of education despite increasing demand, and this has been the root cause of the formation of the education bubble in Korea.

As an education bubble gets bigger, resistance towards education reform designed to remove the bubble became stronger. Private tutoring has obtained political influence as an industry in its own right and this has become an obstacle to solving the quality problems of schools. Controlling quantitative expansion of low-quality colleges through government regulation or market competition, or closing down poor quality colleges became politically much more difficult. Under such circumstances, strong proponents of education equalization to reduce vertical differentiation at the expense of education quality have gained considerable political support and formed a political veto group against education diversification.

In Korea, there have been numerous debates and attempts to remove the education bubble during its formation period, but the reforms were barely put into practice from 1990 to 2007. Afterwards, despite numerous political economic obstacles, education reform through education diversification was coherently implemented from 2008 to 2013 and became rooted in the

education system. This paper points to two important types of strategy that made education reform happen.

The first is crisis-management strategy. This type of strategy involves systematically utilizing students' and parents' discontent for the education bubble, which had reached crisis level, as the driving force of support for education reform. It also involved utilizing small crises, such as using the school violence crisis to strengthen character development, and implementing college restructuring in response to students' demand for tuition reduction. The second is opening-up strategy. This involves opening up education to the industry, parents, new players, and foreign countries. It also includes the "whole-of-government" approach, where education reform is not conducted solely by the Ministry of Education, but coordinated throughout the whole government.

Recent research on policy reform suggests that crises create significant reform opportunities (OECD, 2010; Lim, 2010).<sup>7</sup> The crises that trigger education reform often come from the external shocks. Good examples are Denmark, where education reform was taken to the full-scale after disappointing results on the PISA test, and Portugal, where higher education reform took place following the Bologna process (Wurzburg, 2010). However, indicators concerning education bubble based on solid international comparisons are not so widely available to provide external shocks to a country with a high proportion of education bubble. On the contrary, Korean students' high scores on the PISA is an obstacle for reform advocates who desire change in teachers' teaching and assessment methods and at the same time used as justification for those who oppose reform.

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<sup>7</sup> Many reforms in economic and social sectors in Korea were implemented after the Financial Crisis in 1997 (Lim, 2010)

Unlike Denmark and Portugal, where crises appeared abruptly from the outside, Korean crisis of education bubble gradually developed over a long period between 1990 and 2009 (Lee, Jeong, Hong, 2014). The education bubble has been built up for a long time to engender a sense of crisis among parents and policy makers. Thus the problem accumulated for roughly twenty years while reforms were constantly delayed. Discontent of the people could no longer be ignored, and reform began in earnest in 2008. Of course, not all countries are successful in transforming a crisis into an opportunity. A crisis opens up the window of opportunity only for those who are prepared, and as the window can close at any moment a systematic strategy is required. From this aspect, the following will observe how Korea was able to turn the education bubble crisis into an opportunity for education diversification reform.

The first strategy was building on earlier failed reform efforts. In Korea, discussions of education diversification began in 1995 through the Education Reform Committee of the Kim Young-Sam administration. The committee suggested an ambitious blueprint for education reforms based on broad consensus, but because the committee began mid-way through Kim Young-Sam's stay in office, not many reform measures were actually implemented. Afterwards, during the Kim Dae-Jung and Roh Moo-Hyun administrations, reform measures were discussed and attempted, but not on a consistent basis. During this time there was much debate between equalization and diversification approaches, and the Korean Teachers and Education Workers Union became legalized, which sparked much conflict with the existing Korean Federation of Teachers Association. The fact that there were seven ministers for the Ministry of Education during the Kim Dae-Jung administration and six for the Roh Moon-hyon administration shows why implementing policy with consistency was difficult. The concept of education diversification was first mentioned by the Education Reform Committee of the Kim Young-Sam

administration, and after more than ten years of discussion and trial-and-error, agendas were put into a coherent reform framework and implemented with consistency during the Lee Myung-Bak administration.

The second strategy was obtaining an electoral mandate for education reforms. President Lee Myung-Bak was elected into office after including the education reform plans in his presidential election pledge. The education reform pledge to cut private tutoring expenditure in half through the “High School Diversification 300” plan and the “Liberalization of University Admissions” plan, which focused in the implementation of the Admissions Officer System, was an important part of his presidential election pledge. As it takes long time lags for education reforms, unless they are implemented at the beginning of the presidential term, results are unlikely to appear during the period in office<sup>8</sup> and thus make it difficult for reform measures to be continued by the proceeding administration.

The third strategy was pursuing evidence-based reforms with information disclosure and solid research. The stronger the opposition and disagreement on education reform, it is necessary to pursue it based on the evidence that are underpinned by information disclosure and solid research. When the Education Information Disclosure Act was passed,<sup>9</sup> there was much concern over the disclosed information on students’ academic performance working to strengthen vertical differentiation. However, rather than high-performing students, the disclosure focused on the proportion of under-achieving students, and as policy centered on increasing financial support

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<sup>8</sup> Just a single-term for five years is allowed for the President through the constitution in Korea

<sup>9</sup> Detailed discussion on the process legislative enactment of the Education Information Disclosure Act is described in Hong (2012).



for those schools with relatively large proportions of under-achieving students instead of giving penalties, the disclosed information was utilized to strengthen horizontal differentiation.

School information disclosure was not limited to information on academic performance of students at primary and secondary schools, but a detailed information disclosure system on the quality of colleges has been utilized for college restructuring, and concrete information on private tutoring expenditure and school violence were also made available. A major reason why educational changes of the past have been delayed is the approach of treating education problems as within-school matters and refusing to deal with them through an open framework. Therefore, education reform based on evidence carries much importance as it induces consistent effort to deal with problems until the crisis becomes resolved.

The fourth strategy was engaging teachers by mediating their conflicting interests. As it is required of teachers to actually deliver the reform contents, it is important to make sure they do not turn away from reform. When the reform measures were implemented, the two most important reform agendas pertaining to teachers were the Open Recruitment of Principals and the Teacher Appraisal for Professional Development. Before the system to recruit principals through open competition was introduced, superintendents of the local Office of Education appointed principals among teachers who have filled the necessary promotion points, and often teachers with only a few years left before retirement were selected. In addition, superintendents would appoint principals to schools out of personal preference, so principals were frequently changed every year.

The Open Recruitment of Principals system faced strong opposition from the Korean Federation of Teachers Association, and the teacher evaluation system was strongly opposed by the Korean Teachers and Education Workers Union. The teacher evaluation system was

suggested by the Education Reform Committee in 1995, but its implementation was delayed. In particular, several attempts made in the National Assembly for legislative enactment ended in failure. Finally, both policies were implemented while reflecting the opinions of both interest groups to the greatest degree possible. The Open Recruitment of Principals was implemented for 50 percent of new principals, and the outcomes of teacher evaluation were to be used for teacher training while not directly affecting the compensation of teachers.<sup>10</sup>

The fifth strategy was transforming small crises that emerged during the reform process into reform opportunities. The corruption scandal of principals revealed by Korea's Board of Audit and Inspection created reform opportunities to implement the Open Recruitment of Principals system. The social protest of college students for halving college tuition also created opportunities for expanding the national scholarship system to lessen the financial burden of tuition and at the same time actively pursuing the restructuring of colleges. As the drastic increase in the taxpayers' burden for supporting college students provided grounds for opposing state financial support for low-quality colleges, an opportunity arose for setting the framework for structural reform to exit failing colleges. In addition, education of character skills became reinforced after school violence led to the tragic suicides of the victims. Through information disclosure, education crises were continuously and systematically managed, and by actively utilizing, rather than avoiding, such crises as opportunities for reform, continuous and positive changes in education became possible.

In addition to the crisis-management strategy that is often used in other countries, education diversification reform must focus on opening-up strategies to tackle the fundamental

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<sup>10</sup> The Open Recruitment of Principals was legalized and teacher evaluation was established through a newly made regulation on Teacher Appraisal for Professional Development through Presidential decree in 2011.

problems of the education bubble. The problem of a closed education system is found in all countries, but it is particularly serious in Korea and closely related to the root cause of the education bubble. Education provided through the closed system of top-down orders and controls within hierarchical ladder composed of the Ministry of Education - local Office of Education - principal - teacher cannot enhance low education quality and weak horizontal differentiation. This paper will describe opening-up strategies used by Korea in its pursuit for education diversification.

First, education was opened to allow more active participation from the industry. A crucial factor to Meister high school's success is the recruitment of former CEOs as school principals. For example, an Automobile Meister High School in Busan recruited a former CEO of Renault-Samsung, and a Semi-conductors Meister High School in Chung-Nam recruited a former CEO of Hynix as the school's principal. Such openness contributed to Meister high school's formation of a new model for the cooperation with industry. At the college level, in order to enhance industry-college cooperation, University-Industry Partnership Professors were increased by 2000. In addition, an organization to consult on information pertaining to Donation for Education was started. Opening education to industry through such methods was a key strategy for improving Meister high schools and specialized high schools, 2-year colleges, and 4-year colleges focused on vocational and technical education.

Second, education was opened to allow more active participation from parents. More functions were empowered to the school deliberation committee which consist parents, teachers, and local experts. Parents could participate in the recruitment of principals and evaluation of teachers through the school deliberation committee. In addition, selecting specific education programs for the After School Class became one of the important functions of the school

deliberation committee. Yet, in most schools, rather than a genuine voluntary participatory institution, the school deliberation committee is nothing more than a supporting group for the principal for school operation. Nonetheless, positive changes are occurring as many superintendents who came into office through direct elections are actively supporting policies that encourage a larger role for parents through volunteering programs and parent education programs with the financial assistance of the Ministry of the Education.

Third, education was opened to allow more *new players* in education, including admissions officers, social entrepreneurs and college students for Donation for Education, private entrepreneurs for smart education and career guidance as well as new types of teachers. Education diversification has led to *new players* in charge of new roles previously non-existent in education. Teachers have been diversified through the role of new teachers, such as head teachers, career counselors, and English-expert teachers. In college admissions, an entity completely new to Korea, known as admissions officers, make valuable contributions to the process of admissions based on new criteria other than test scores. In After School Class, *new players* like social entrepreneurs and college students for Donation for Education, private entrepreneurs for smart education and career guidance are bringing about changes in the classroom. It is expected that such new players will be at the forefront of promoting the diversification of education.

Fourth, education was opened more actively to countries abroad. Through the WCU, colleges invited globally renowned scholars from abroad to teach and research in Korean colleges, and a plan to increase the number of foreign students studying in Korea from 100,000 to 200,000 was announced. The Songdo Global University Campus is attracting universities from abroad, and the free economic zones in Jeju Island and Songdo have brought in primary and

secondary schools from abroad and have opened entrance partly to domestic students. In addition, the legislative enactment of the law on Global Educational Zone has led to some parts of Daegu, Incheon, and Yeosu being designated as global educational zones.

Fifth, in pursuit of education reform, the “whole-of-government” approach was taken where education policies are not carried out solely by the Ministry of Education, but through cooperation with other related ministries. While the Ministry of Education, Science, and Technology signed MOUs with major firms for the employment of Meister high school and specialized high school graduates, the Ministry of Strategy and Finance made efforts to secure as many jobs as possible in the public financial sector and public enterprises, and the Ministry of Public Administration and Security focused on expanding jobs for graduates in public institutions. Above all, President Lee Myung-Bak made frequent field visits and provided official support. An important reason why Meister high schools became successful in a relatively short period of time was that in a way it was the Presidential project, and as the President himself pursued it with much enthusiasm, cooperation of various ministries was naturally achieved.

In addition, when the seriousness of school violence led to policies to reinforce education of character skills, the School Violence Countermeasure Committee, headed by the prime minister, was formed and the Minister of Gender Equality and Family, the Minister of Public Administration and Security, the Minister of Culture, Sports, and Tourism, and the Minister of Education, Science and Technology participated as committee members to develop and implement a comprehensive package of policies difficult for the Ministry of Education, Science, and Technology to handle alone. Such policies include the “Shutdown Policy”, which regulates playing computer games late in the night for children, and broadcast campaigns that emphasize the importance of character education within the family.

As shown in Table 2, this section discussed strategies to overcome political economic obstacles pertaining to education diversification reform, which were summarized into two types of strategies; crisis-management strategies and opening-up strategies. Crisis-management strategies include building on earlier failed reform efforts, obtaining an electoral mandate for education reforms, pursuing evidence-based reforms with information disclosure and solid research, engaging teachers by mediating conflicting interests among teachers, and transforming small crises into opportunities. And opening-up strategies, which should be particularly stressed in a country with a considerable amount of education bubble, open education to industry, parents, and new players, as well as to countries abroad and different government ministries.

## **5. Conclusion**

I intended to generalize, as much as possible, the implications of education reform of Korea, which appears to be an exclusive case and can even be seen as being done in the opposite direction as that of the UK or the US. The education reform conducted in Korea from 2008 to 2013 can be simply defined as the education diversification to eliminate the education bubble. The objective was to show the type of goals, agendas, strategies that were set to overcome the education bubble which immensely increased private tutoring expenditure and produced college graduates receiving lower wages than high school graduates.

First, I showed that a balanced consideration of the two dimensions of human skills, cognitive and non-cognitive skills, is crucial in setting the goal of education diversification reform. In particular, through figures representing conceptual framework, I showed how such goal setting is different from equalization policy in the domestic setting, and how globally it can

be compared with education reforms of the US, UK, and Japan. I emphasized that for countries like Korea, where excessive emphasis on only cognitive skills led to the formation of the education bubble, it is important to improve the quality of education institutions that emphasize non-cognitive skills through education diversification.

Second, I showed that the reform agenda for education diversification include diverse policies designed to reinforce horizontal differentiation and actively lessen the financial burden of education expenditure, along with other policies usually emphasized for education reforms to enhance the quality of education in other countries.

Third, I showed that major strategies to overcome political economic obstacles pertaining to education diversification reform were opening-up strategies that opened education to industry, parents, new players, countries abroad, and other ministries, together with crisis-management strategies that transformed not only the overall sense of crisis among parents and the public but also incidences of small crises into significant reform opportunities.

Lastly, I hope and expect that goals, agendas, and strategies of education diversification reform discussed in this study will contribute to the formation of a more balanced and wide-ranged consensus on education reform not only for Korea but also for other countries.

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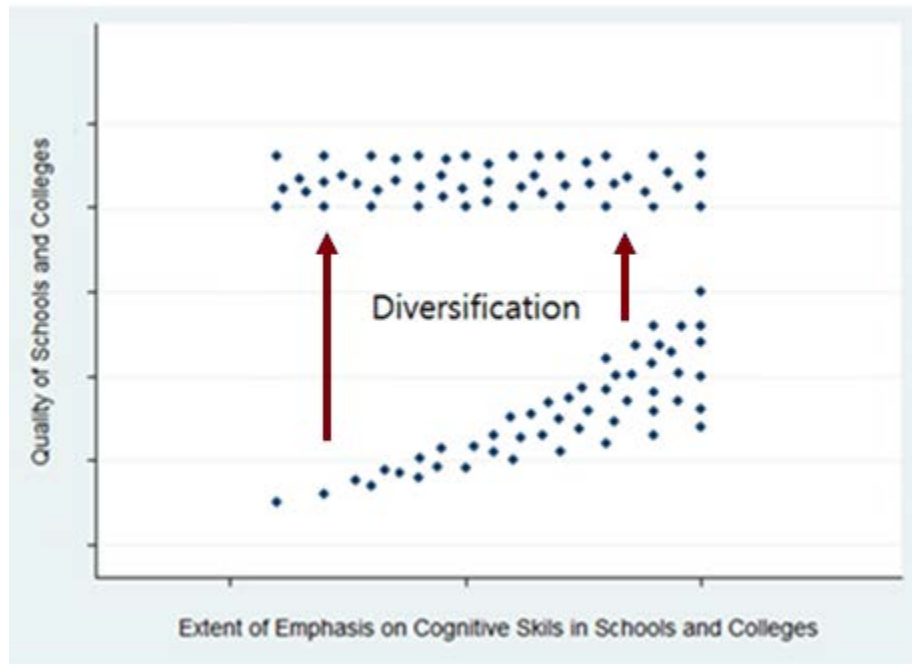


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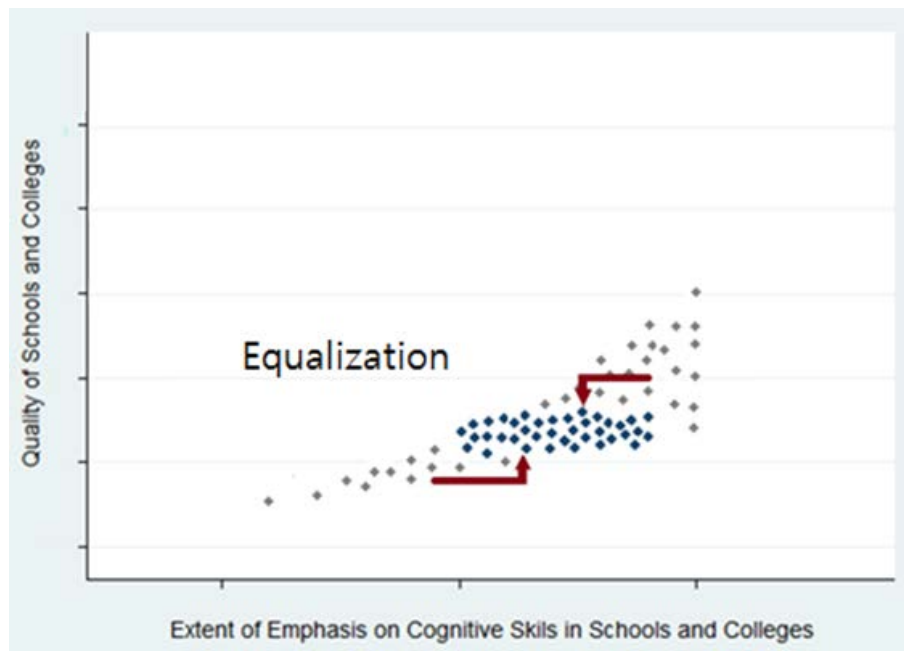
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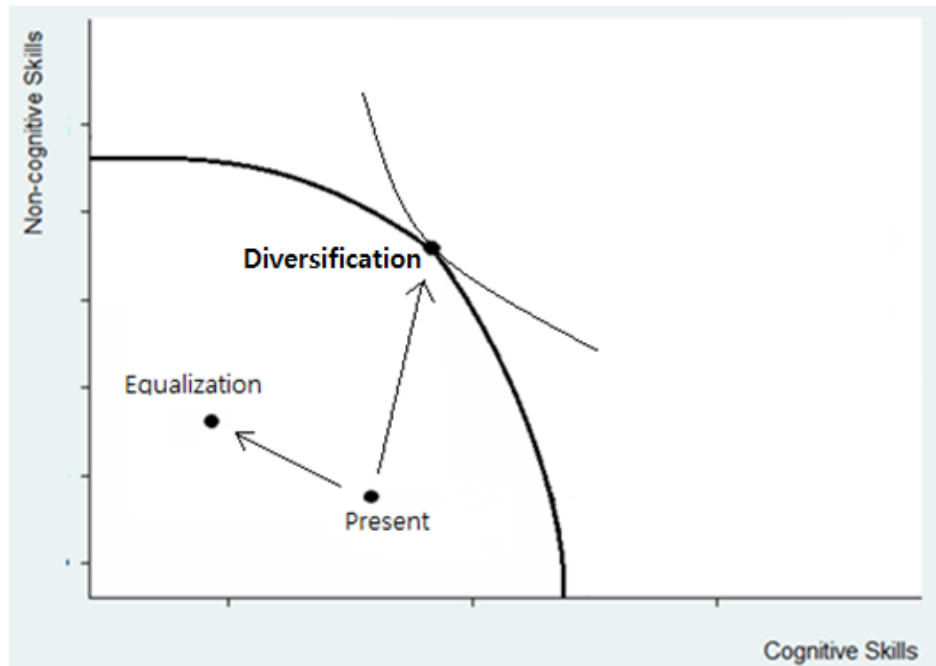
**Figure 1: Distribution of Schools and Colleges before and after Education Diversification**



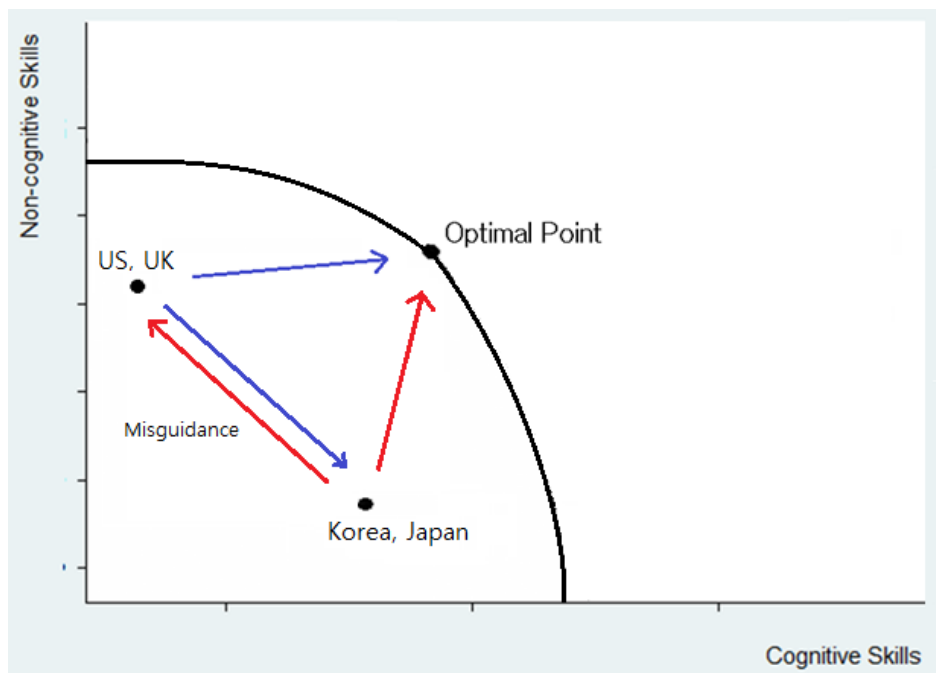
**Figure 2: Distribution of Schools and Colleges before and after Education Equalization**



**Figure 3: Education Diversification versus Education Equalization**



**Figure 4: Misguidance of the International Comparisons on Education Reforms**



**Table 1: Korea's Reform Agenda for Education  
Diversification (2008-2013)**

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## **I. Foster Horizontal Differentiation**

### **1. Reinforce Vocational Education**

- a. Meister high schools initiatives
- b. Strengthen career guidance (employ new 4,500 career counseling teachers)
- c. Introduce “Job-first, Diploma-Later” career path for vocational high school graduates
- d. Encourage changes in 350 specialized vocational high Schools

### **2. Teaching and Assessment for Creativity & Character Skills**

- a. Introduce Admission Officer Systems for universities
- b. Introduce Admission System for Self-directed Learning for special-purpose high schools
- c. Revitalize character education to combat school violence (school sports clubs, student orchestra, social and emotional learning)
- d. Introduce smart education (digitalize textbooks)

### **3. Support Universities that Focus on Teaching and Cooperation with Industry**

- a. Introduce supporting system for universities that teach well (University Educational Capacity Enhancement Program (UECEP); Advancement for College Education (ACE))
  - b. Introduce supporting system to link universities and companies (Leaders in Industry-University Cooperation (LINC); 2,000 I-U Partnership Professors; Contract Majors; World Class Colleges (WCC))
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## **II. Enhance the Quality of Education**

### **4. Strengthen the Autonomy of Schools**

- a. High School Diversification 300 Initiatives (autonomous private high schools; boarding high schools; autonomous public high schools)
- b. Introduce a system to recruit principals through open competition

### **5. Strengthen the Accountability of Schools**

- a. Nation-wide information disclosure on schools
- b. Pulling students out of underachievement based on nation-wide assessment of all students
- c. Evaluate teachers by students, parents, and colleagues

### **6. Enhance the Quality of Research Universities**

- a. Governance reforms for national universities (corporatize SNU; abolish direct election system of presidents of national universities)
- b. World Class University (WCU) (invite 340 foreign scholars to 30 domestic universities)
- c. Double government support for research of university professors (from 16% (2008) to 32% (2013))
- d. Establish International Science Business Belt (Institute of Basic Science (IBS); on-campus research centers at KAIST, GIST, DGIST, and POSTECH; Heavy-ion Accelerator)

### **7. Restructuring Universities**

- a. Establish data-based framework for restructuring universities
  - b. Set up University Restructuring Committee (URC)
  - c. Announce annual list of universities that are subject to limited financial support or limited subsidies for student loans, or even to be closed down
-

### **III. Reduce the Private Burden of Education Expenditure**

#### **8. Reduce the Burden of Private Tutoring**

- a. Expand After-School Class
- b. Encourage local communities and industries for active educational donation
- c. Education Broadcasting System (EBS) provides quality CSAT courses
- d. Regulate through price ceiling and limited hours of late-night private instruction

#### **9. “Half Burden of Tuition” Initiatives**

- a. Launch National Scholarship Program through Korea Student Aid Foundation (KOSAF)
  - b. Introduce Income Contingent Loan
  - c. Incentivize universities to reduce student’s burden of tuition
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**Table 2. Reform Strategies for Education Diversification**

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**1. Crisis-Management Strategies**

- a. Building on earlier failed reform efforts
- b. Obtaining an electoral mandate for education reforms
- c. Pursuing evidence-based reforms with information disclosure and solid research
- d. Engaging teachers by mediating conflicting interests among teachers
- e. Transforming small crises into significant reform opportunities

**2. Opening-Up Strategies**

- a. Open to allow more active participation from the industry
  - b. Open to allow more active participation from parents
  - c. Open to new players in education
  - d. Open to countries abroad more actively
  - e. Open to other ministries through “whole-of-government” approach
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