The Evaluation of Educational Policies about High School System Reform: Focusing on the Cases in Chungcheongbuk-do

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I. Introduction

1. Background of the Research

Much has been discussed, pursued, and insisted on the educational reform. The Final Report of the Presidential Commission for Educational Reform on December 12, 1987 is another important historical accomplishment. Education reform efforts in other major countries, such as the Final Report of the Temporary Educational Council published on August 7, 1987 in Japan, A Nation at Risk in U.S. on April, 1983, America 2000: The Education Strategy suggested by President Bush on April 1991 was full of suggestions that could be implemented here in Korea.

In Early 1990s, a new, epoch-making educational policy, The Reform of High School Educational System, was suggested. The major goal of the policy was to readjust the proportion of general high school versus vocational high school. By doing this, more labor forces could be provided to industry, competition to college entrance examination would be lessened, and ultimately the intrinsic attribute of education would be embodied by changing the current undesirable, examination-centered educational practice.

What matters is, however, not the argument itself but carrying out an educational reform such as a policy switch. We have experienced administrative practices which were at a loss after the argument of reform. This is due to the apprehension of a hard work, or meeting the challenges. Being tied to the present laws and regulations

is also another reason for the delay of reforms. Reform is indeed a difficult process. There has been a change in educational policy in Chungcheongbuk-do. The assumptions and processes of the reform and the results of reform are not certain because it was a new and creative activity.

2. Objectives of Research

The major objective of this study is to evaluate several cases of educational reform in Chungcheongbuk-do during the 1980s, which reviews the validity of the educational reform. The results of this study also give some implications to educational administrators in a period of regional educational autonomy.

3. Research Methods

Several major educational reform policies were described and the validity of the policies were discussed. A case study methodology was used.

In Korea, the focus of educational reform has been placed on the educational system, and on school facilities. The belief that the content and method of education should receive more emphasis than before is reflected in this study.

4. Limitations of the Research

The study has several limitations on its content and scope. First, it may be too early to investigate the possible effects of some educational reform policies administered in Chungcheongbuk-do. The analysis of the policy planning might be an alternative, but it has not being fully investigated in this study.

Second, appropriate criteria for evaluation was not developed, hence the results might be influenced by subjectivity. At the same time the results of policies were the major source of data to evaluate.

Finally, no comparable data was available in other cities or administrative districts. After five or ten years, the reform policies will result in a certain products. Similar evaluation studies measuring the achievements of the graduates in the reform program would be necessary.

II. Regional Background

Information about regional background in Chungcheongbuk-do at the time of educational reform policy was developed is essential in understanding the characteristics and directions of the policy itself.
1. An Overview of Secondary Education in Chungcheongbuk-do

The population of Chungcheongbuk-do was 1.4 million in 1990. Forty four percent of the population was working in primary industry, fifteen percent in secondary industry, and forty one percent in tertiary industry in 1990. It was far more underdeveloped in 1984, just before the new educational reform policies were planned and administered. In addition, the unique conservativeness of this area might be a major obstacle for any adaptations in a period of drastic change.

The rate of entering higher level schools in Chungcheongbuk-do from elementary to junior high school, and junior high to high school was not lower than other areas. However, the rate of entering colleges and employment after secondary education was lower than that of other areas. Many schools, both private and public, were established after the Restoration of independence from Japan. Therefore, the number of schools was quite many. However, the population decrease in rural areas put the schools in the financial straits. The facilities of the private schools were old and insufficient.

During the educational system reform movements in the early 1950s, many schools in Chungcheongbuk-do separated junior high school from high school. As the population decreased in rural areas, the size of each school was reduced, and the number of teaching staff also decreased. The resulting financial stringency prevented investment to enhance the quality of education. As a result, the schools especially in rural areas lost the trust from the community, and the number of students enrolled in high schools in the small administrative units, such as Kun, Eub, and Myun, were below the approved number of students for several years. Many lower achievers easi-

<table>
<thead>
<tr>
<th>Table 1</th>
<th>The Number of General High Schools and Vocational High Schools in Chungcheongbuk-do.</th>
</tr>
</thead>
<tbody>
<tr>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>Number of schools</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>39</td>
</tr>
<tr>
<td>Vocational</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
</tr>
<tr>
<td>Number of classes</td>
<td></td>
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<tr>
<td>General</td>
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<tr>
<td>Vocational</td>
<td>451</td>
</tr>
<tr>
<td>Total</td>
<td>1135</td>
</tr>
<tr>
<td>Number of students</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>40419</td>
</tr>
<tr>
<td>Vocational</td>
<td>26812</td>
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<td>Total</td>
<td>67231</td>
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</table>
Table 2: The Status of High School Graduates After Graduation in Chungcheongbuk-do.

<table>
<thead>
<tr>
<th>Year</th>
<th>Graduates</th>
<th>Enrolled</th>
<th>Employed</th>
<th>Not employed</th>
<th>Military</th>
<th>Not identified</th>
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<tbody>
<tr>
<td>80</td>
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<td>3641</td>
<td>1144</td>
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<tr>
<td></td>
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<td>1015</td>
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<td>4656</td>
<td>4515</td>
<td>2993</td>
<td>59</td>
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<tr>
<td>81</td>
<td>General</td>
<td>11330</td>
<td>5440</td>
<td>1061</td>
<td>2419</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Vocational</td>
<td>7037</td>
<td>1012</td>
<td>2995</td>
<td>1112</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>18367</td>
<td>6452</td>
<td>4056</td>
<td>3531</td>
<td>63</td>
</tr>
<tr>
<td>82</td>
<td>General</td>
<td>13504</td>
<td>6687</td>
<td>978</td>
<td>1552</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Vocational</td>
<td>8406</td>
<td>1304</td>
<td>3196</td>
<td>1312</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>21910</td>
<td>7991</td>
<td>4174</td>
<td>2864</td>
<td>76</td>
</tr>
<tr>
<td>83</td>
<td>General</td>
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<td>1038</td>
<td>1461</td>
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<tr>
<td></td>
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<td>4570</td>
<td>1360</td>
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<tr>
<td></td>
<td>Total</td>
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<td>8866</td>
<td>5608</td>
<td>2821</td>
<td>134</td>
</tr>
<tr>
<td>84</td>
<td>General</td>
<td>15162</td>
<td>8221</td>
<td>1420</td>
<td>1766</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Vocational</td>
<td>10045</td>
<td>1192</td>
<td>5572</td>
<td>967</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Total</td>
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<td>9403</td>
<td>6992</td>
<td>2733</td>
<td>125</td>
</tr>
</tbody>
</table>

ly enrolled and graduated from general high schools in rural areas, and most of them could not enroll in colleges (Table 1). They were also not well prepared for employment.

2. High School Graduates’ Status after Graduation

As mentioned above, one of the major problems in education in the community was what the high school graduates were prepared to do for their livelihood. For those who graduated general high school, the rate of enrollment in colleges was very low. The graduates who failed to enter colleges or were unemployed brought about social problems due to lack of meaningful activity. Adequate measures to help them find their way were urgent (Table 2).

In vocational high schools, similar problems could be found because some departments were impractical. In 1984, the total number of high school graduates was 25, 207. Thirty six percent of the graduates (8,912) were neither enrolled nor employed. The rate of enrollment to colleges of general high school graduates was only fifty five percent. This would increase the number of students who were waiting for another chance to enter a college next year (Table 2).
3. The Problems of Equalization of High School in Chungcheongbuk-do

The equalization of high school has brought about many problems. In Chungcheongbuk-do, it was administered in Cheongjoo-shi.

Five problems were identified with equalization of high schools in Chungcheongbuk-do: (1) academic achievement level was lowered; (2) instruction was difficult with a heterogeneous group; (3) motivation for achievement was lowered; (4) a specific character of a school was lost; (5) education for talented and handicapped students was not available.

To head toward diversification from equalization, and to accomplish equal opportunity according to individual aptitude and ability, we had to search for a new education system.

III. Major Educational Policies

1. The Policy to Expand Vocational High Schools

Currently the expansion of vocational high school is a major ambitious government plan. From 1990 to 1995 the proportion of general versus vocational high school will be changed to 50:50. The plan is very urgent because of the need for reorganization of the industrial structure, changes in the community by localization, and increased demand of the technical labor forces. However, it is not certain if the goals of the plan can be achieved. One of the reasons for the skepticism is parents' preference for their children to enter colleges and universities. A similar policy was already administered in Chungcheongbuk-do as follows.

(1) Expanding Vocational High Schools in Chungcheongbuk-do

Various ways were used in expanding vocational high schools in Chungcheongbuk-do: rearrangement of schools; conversion of a general high school to a vocational high school; adding a vocational program to a general high school; readjustment of departments in vocational high schools; establishment of courses for employment in general high schools; establishing job training centers for adolescents not enrolled; and establishing practice centers in schools located in a central area.

(2) Rearrangements of Schools

The first phase of expanding vocational high school was accomplished through the school rearrangements. One of the objectives of this policy was integrating small schools to enhance the quality of education. On the process of rearrangement, 27 schools were reduced to 19. At the same time, the number of students approved to
general high schools was transferred to vocational high schools.

(3) Conversion of General High Schools to Vocational High Schools

After the Restoration of independence from Japan, many general high schools were established even in the Kun, Eub, and Myun area. Due to the decrease of population in rural areas many schools experienced financial difficulties. Some general high schools, that were difficult to be integrated into other schools due to the community needs, were converted to vocational high schools. Six general high schools were converted to technical or commercial high schools.

(4) Adding Vocational Programs to General High Schools

According to this plan, vocational programs, especially technical, were added to existing general high schools. The name of the school was conserved by the request of community or alumni association. However, the school was a comprehensive high school in reality. Two schools were classified in this category.

(5) Readjustment of Departments in Vocational High Schools

To meet the demands of recent changes in society, some departments of agricultural, technical, and commercial high schools were readjusted. First, some departments in agricultural high schools were converted to technical departments, therefore the name of such school was changed from agricultural high school to agriculture and technical high school. The department of chemical engineering was newly introduced to two existing agricultural high schools in Chungcheongbuk-do.

Next, several departments were converted to new departments, or new departments were added to existing agricultural or technical high schools. Some departments such as electronic, electrical, or mechanical engineering were added to five technical high schools from 1991 to 1993 school year. However, some departments were converted to others in four agriculture and one mining high schools.

Finally, several departments concerning electronic data processing or tertiary industry were introduced to commercial high schools to supply skillful labor forces for our country’s new social demand. Departments of information processing and accounting were added to two of the existing commercial high schools.

(6) Establishing Courses for Employment in General High School

Chungcheongbuk-do has a long history in establishing courses for employment in general high school. Participating schools to this program had been increased from nine to fourteen during the three years of 1991 to 1993.

(7) Establishing Job Training Centers for Adolescents not Enrolled

No technical high school was available to students residing in Boeun, Okcheon,
and Yungdong-Kun, the southern part of Chungcheongbuk-do until 1990. Free job-training centers for adolescents not enrolled in a high school was established in Okcheon Technical High School and Cheongjoo Mechanical Engineering High School in 1989 and 1993, respectively.

(8) Establishing Joint Practice Centers

The administration of the new educational policy, expansion of technical high schools, readjusting departments of agricultural high schools, and establishing courses for employment in general high schools resulted high demand of practice and new facilities and equipment. Huge amount of financial resources were needed to construct and purchase facilities and equipment. At the same time, the community in rural area had experienced unpredictable changes. To solve the problems, instead of providing facilities and equipments to each school, joint practice centers were established in central areas.

An agricultural practice center was established at Cheongjoo Agricultural High School, and a technical practice center at Cheongjoo Mechanical Engineering High School. An agriculture Education Museum is planned to be established at Cheongjoo Agricultural High School.

(9) Results

To identify the effects of the policy, expansion of vocational school, the number of students in each program was compared across time (Table 3). In 1985, before the policy was administered, the ratio of students in each program was nearly 60:40 (general versus vocational). However, in 1991, the ratio of the students changed to 52:48 (general versus vocational).

2. Multi-Foreign Language Education Policy

The future world will be internationalized and foreign language is really important for the students who will live and work in the future. Foreign language education should get higher priority.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>General</th>
<th>Vocational</th>
<th>Ratio (General:Vocational)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>26430</td>
<td>16469</td>
<td>10371</td>
<td>60:40</td>
</tr>
<tr>
<td>1987</td>
<td>26766</td>
<td>16448</td>
<td>10561</td>
<td>61:39</td>
</tr>
<tr>
<td>1989</td>
<td>25699</td>
<td>16079</td>
<td>10241</td>
<td>59:41</td>
</tr>
<tr>
<td>1991</td>
<td>25479</td>
<td>13229</td>
<td>11379</td>
<td>52:48</td>
</tr>
</tbody>
</table>

*includes students in a program for employment in a general high school
In this context, foreign language was regarded as daily language study rather than daily English study in Chungcheongbuk-do for quite a long time. The concept of multi-foreign language education was used to teach as many languages as possible. Various multi-foreign language education policies have been administered in Chungcheongbuk-do.

Chungjoo High School located in the city of Chungjoo, in Chungcheongbuk-do tried some remarkable extra-curricula activities in 1981. Among various extra-curricula programs, twelve extra-curricula activities were of interest: philosophy, mathematics, physics, chemistry, biology, earth science, English, Chinese, French, German, and Spanish. Philosophy, mathematics, and physics were compulsory and six foreign language programs were recommended for students to enroll, if possible.

At that time, the extra-curricula programs got national attention because of the following reasons: philosophy was not included in the national curriculum, the objectives of mathematics program was logic, and six foreign languages, although introduced as extra-curricula activities, were taught in a high school.

Every Fall, a multi-foreign language fair, such as a speech contest, and oratorial contest, a musical contest, and writing a letter in foreign language, was held at Chungjoo High School. This program has continued, and given strong influence to the multi-foreign language education in Chungcheongbuk-do. Furthermore, Chungjoo-shi became a model for others in multi-foreign language education, and a private foreign language high school was established in Chungjoo-shi under the influence of extra-curricula programs at Chungjoo High School.

Chungcheongbuk-do had a policy to teach foreign languages at an early stage. The Ministry of Education recommended an extra-curricula English program from fourth grade in 1982. However, it was from third-grade in Chungcheongbuk-do. If a volunteer was available, other foreign languages such as Chinese and Japanese, were recommended to be taught since 1987.

Multi-foreign language education programs were also recommended at junior high school level from 1985, beginning from Cheongjoo-shi and extended to the rural areas around. A second foreign language was believed to be difficult even to high school students. Some people were opposed to this program because offering several foreign languages to junior high school students at a time might be too difficult. However, this program was applied to outstanding students, and the participation to the program was up to the students. The applicability of the program to junior high school students was proved by the continuity of it until today.

(1) Pilot Administration of the Second Foreign Language Education Program

The opportunity to choose from various foreign languages has been very limited to students because each school could afford only a few teachers in one or two foreign languages. Five general high schools in Chungjoo-shi, Chungcheongbuk-do
adopted a new foreign language education program since 1990. German, French, Chinese, Japanese, and Spanish teachers were arranged to three public high schools. Students of five high schools, including three public and two private, could choose a second foreign language from the above five, and the teachers circulated among each school to teach. Students could choose from more languages and learn more than one or two foreign languages if they wanted.

(2) Multi-Foreign Language Programs at Chungang High School, Cheongjoo-shi
Multi-foreign language programs were established at Chungang High School, Cheongjoo-shi from 1991. Six language programs, such as German, French, Chinese, Japanese, including English.
It was the first in Korea to introduce Russian as a foreign language in a high school. It was also the first that has foreign language high school system. The name of school will be changed to foreign language high school from 1992.

3. High School Specialization Policy

High school equalization policy, first applied to Seoul and Pusan in 1974, and extended to other metropolitan areas such as Taegyeon, Incheon, and Kwangjoo, was administered to seven major cities including Cheongjoo from 1979. The policy has brought about as many problems as solutions. Measures to solve the problems have been suggested to revise the policy, but little administrative effort or practice was carried out. The growing number of people in various social levels were dissatisfied with the high school equalization policy.
To solve the problem, a high school specialization policy was attempted in Chungcheongbuk-do. This policy was partially in conflict with educational laws and regulations at that time. However, many people paid attention to the policy as a possible measure to solve the problems of high school equalization.
The types of specialized high schools were diverse, and the policy was carried out step by step according to the types.

(1) Physical Education Program at Keumcheon High School
Elite physical education has been the major focus in Chungcheongbuk-do since 1970s. It had a successful tradition of elite physical education, and the desire to maintain the tradition was very high in the community. However, the circumstances were highly negative. It also had many educational problems to solve.
First, most athletes did not attend classes. Second, financial problems existed to support athletes in a school. Finally, they had to search for a new efficient physical education system which could solve the above two problems. Establishing a physical education high school produced too much financial burden to Chungcheongbuk-do.
As a result of research, adding a physical education program to a newly established high school was adopted. A physical education program was prepared to the newly established Keumcheon High School in 1988. A existing public playground and other facilities were used to train the athletes in this physical education program. Finally, the physical education program was separated from Keumcheon High School and formed an independent high school, Chungbuk Physical Education High School in 1991.

(2) Chungbuk Science High School
A science high school was established in Chungcheongbuk-do as it was so in many other administrative districts. It is included in the High School Specialization Policy not because only Chungcheongbuk-do had a science high school but the objectives of the science high school were relevant to the policy, that is, to overcome the disadvantages of high school equalization policy.

(3) An Art Education Program in Chungang High School
An art education program was prepared in Chungjoo Chungang Girls High School in 1990, and the name of the school changed to Chungang High School. Music and dance programs were added to this program in 1991. In 1993, the program will be developed into a new Art Education High School.

(4) A Multi-Foreign Language Education Program in Chungang High School
It was already described in detail earlier.

(5) Establishment of Chungang Foreign Language High School in Chungjoo
Specialized high schools described so far were prepared to compensate the shortcomings of high school equalization policy in Chungjoo-shi. A foreign language high school in Chungjoo was established to balance regional development in Chungcheongbuk-do. At the same time the educational backgrounds and characteristics of Chungjoo-shi played an important role in establishing the school in 1992.

(6) Specialized High Schools for Humanities and Social Sciences
In the process of planning specialized high schools such as physical education, art education, science, foreign language high schools, the establishment of a humanities and social sciences high school was considered for students gifted or talented in general. A humanities and social sciences high school will be established in 1993.
IV. Evaluation of the Policies and Implications

1. Evaluation of the Policies

Three policies, expanding vocational high school, multi-foreign language education, and high school specialization were described. The objectives, administration process, and results of the policies will be evaluated.

The model of evaluation consists of the following four phases: (1) the policy-making, (2) the content of the policy, including the objectives, measures, and target selection, (3) administration process, and (4) the results.

In policy-making phase, the diagnosis of the problems seemed appropriate in terms of the process and content. Vocational high school expansion policy was attempted to solve the existing problems. Multi-foreign language education policy was appropriate because it will prepare future citizens to live and work in an internationalized and open-door society. The high school specialization policy was also aimed at solving problems caused by high school equalization. It also focuses on fostering education for the gifted and talented students.

The content of the policy and the process of policy-making seemed reasonable. However, the policy-making process was partially democratic. The process was exposed to the residents in the area, but the policies were made chiefly by the person who held the decisive power in Chungcheongbuk-do.

Second, the objectives, means, and the target audience of the policies were evaluated. The objectives of the policies were appropriate and attainable. For example, vocational high school expansion policy now became a national policy, which proves that the policy is appropriate and attainable. The multi-foreign language education policy confronted more negative responses, but ignorance about the program and different cultural circumstances may be the major reason that opposed the policy. The appropriateness of a target audience of the policy could be evaluated in terms of equity and balance.

Third, attainment, consistency and adaptability are the areas of evaluation in administration of the policies. Most policies were carried out following the prescribed courses. Especially, the vocational high school expansion policy was over-achieved in breadth and time. All the policies were administered consistently.

Finally, the results of the policies are assessed in two aspects: cost-effectiveness and efficiency. All policies were cost-effective. Existing schools and teaching staff were rearranged instead of building new schools and hiring new teaching staff members for the high school expansion policy. Tremendous amount of money was saved. The multi-foreign language education policy was also carried out using volunteers and teachers in schools. New programs were just added to existing schools accord-
ing to the high school specialization policy. All specialized high school could be established with little cost to Chungcheongbuk-do.

The efficiency of the policies were proved by the results. The vocational high school policy contributed to the decrement of unemployment of high school graduates. High schools in rural areas could also retain more students than before. Multi-foreign language education motivated students and parents to learn more foreign languages.

A notable side effects came from the private high schools. The high school specialization policy could reduce the chance to recruit high ability students for private high school.

2. Implications of the Research

The current educational reform focuses on external facilities and systems. The curriculum and teaching method should get more priority than before. Educational reform could be planned and carried out at local levels as well as the central level. Obstacles to education reform such as law, custom, and conventions should be revised and switched. Education reform can be carried out in a cost-effective way if administrators and agencies try to and cooperate each other. Finally, central agencies, such as The Ministry of Education should encourage and recommend local level education reform.

3. Suggestions for Future Educational Reform

The following suggestions were extended from the evaluation of three local education reform policies. First, once a policy is adopted, then administrators are recommended to show visions of the policy to the people, and it will facilitate the people’s acceptance and cooperation with the policy.

Second, cooperation between relevant agencies is really important. Otherwise, the policy cannot be carried out due to many obstacles such as lack of budget.

Third, future citizens should be prepared to adapt in an internationalized, rapidly changing world. Cultures of major countries and tribes should be studied and foreign language education will be the basic tools for that.

Next, high school equalization policy needs much revision. Elite education is ignored in our high school system. Humanism should be restored in the curriculum and methods of educational processes.

Finally, education reform could be planned and carried out at all levels of the administrative structure.