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**Performance Management in the
Education Sector :**
A Call for Paradigm Reform in south Korea

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PRESENTERS

A Call for Paradigm Reform in South Korea

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1. Introduction

Foreign institutions have affirmatively evaluated the performance of primary and secondary education in Korea. Such is the case when these assessments are based on outstanding math and science scores achieved during international competitions. However, underlying these superficial results are factors that significantly influence parents and students such as school satisfaction and teacher evaluations, which ranks in the bottom tier among OECD countries.

This paper sheds light on student performance, which rests on the current college-admission system, not the performance-management system. In short, the overall increase in test scores can be attributed to the severe competition characterized by students' will to enter better universities, rather than the notion that a performance-driven system in schools are increasing the quality of students.

Under the college-admission system, performance-management system is not operating effectively. Schools are protesting the sole reliance of college admission-based studies, emphasizing the need for character development. At the same time, teachers and administrators at the Ministry of Education and Human Resource Development are actively dissuading the implementation of scholastic-based performance-management system. However, the absence of such system leads to a vicious cycle, where students continue to seek private tutors through the inadequacy of schools, rooted by skyrocketing demands for college preparation.

As the struggle to provide performance-management system for primary and secondary schools emerge, surveys such as the National-Standard of Education Achievement, City and Provincial Office of Education Evaluation (henceforth "office evaluation"), and the Primary and Secondary School Evaluation (henceforth "school evaluation") are beginning to broach. Hence, this paper will assess the efforts of the current performance-management system in primary and secondary schools and propose a new scheme to improve the current performance-management system in South Korea.

The structure of this paper is as follows. In section 2, a general overview of the performance in schools and the relationship between the results of such performance and the characteristics of performance-management system will be discussed. In section 3, a general overview of the performance-management system in schools will be examined and assessed. Finally, section 4 will propose reforms to improve the performance-management system for primary and secondary schools in South Korea.

2. Performance in Education

Korean scholastic attainment based on international assessment test is clearly high among OECD countries as depicted in <Table 1>. For each category, Korea scored first for science, second for math, and sixth for reading. However, when taking their distribution into consideration, students below level 1 (1%) and students at level 5 (6%) are quite low, meaning a large chunk of the students are positioned between levels 3 and 4 (39% and 31%, respectively). Although the size of students below level 1 is ideal, the size of students at level 5 only resembles the 20th ranking country among the 27 countries surveyed in this test. Hence, although Korea's small proportion of low-performance students is ideal, the incapability to educate outstanding students poses a serious problem.

Table 1. Performance Test

(Unit: Ranking out of 31, Percentage)

	Korea	Japan	U. S.	U. K.	France	Germany	Sweden	Canada	Italy	Mexico
Scientific literacy	1	2	14	4	12	20	10	5	23	30
Math literacy	2	1	19	8	10	20	15	6	26	30
Reading literacy	6	8	15	7	14	21	9	2	20	30
Below level 1	1%	3%	6%	4%	4%	10%	3%	2%	5%	16%
At level1	5%	7%	12%	9%	11%	13%	9%	7%	14%	28%
At level2	19%	18%	21%	20%	22%	22%	20%	18%	26%	30%
At level3	39%	33%	27%	27%	31%	27%	30%	28%	31%	19%
At level4	31%	29%	21%	24%	24%	19%	26%	28%	19%	6%
At level5	6%	10%	12%	16%	8%	9%	11%	17%	5%	1%

Source: OECD "Knowledge and Skill for Life", PISA 2000

In the results from PISA 2000, student engagement shows us very interesting point.

In <Table 2>, student engagement is illustrated by asking students whether they strongly agree, agree, disagree or strongly disagree to the following statements about their school: I feel like an outsider (or left out of things), I make friends easily, I feel like I belong, I feel awkward and out of place, other students seem to like me, and I feel lonely. 41% of Korean students reported to demonstrate a low sense of belonging, the lowest out of the 27 OECD participating countries. This is a striking result, which challenges the academic achievement demonstrated in <Table 1>. Furthermore, low participation, which measures how many times in the past week students say they missed school, skipped classes, and arrived late, shows that only 8% of students feel that they have low participation. Perhaps pressures from parents to attend classes and competition from colleges that require class participation have contributed to this ironical result.

Table 2. Student Engagement

(Unit : Percentage)

	Korea	Japan	U. S.	U. K.	France	Germany	Sweden	Canada	Italy	Mexico
Low sense of belonging ¹	41%	38%	25%	17%	30%	23%	18%	21%	23%	22%
Low participation ²	8%	4%	20%	15%	15%	13%	24%	26%	22%	21%

Source: OECD "Student Engagement at School", PISA 2000

However, why is it the case that high scholastic achievement and low sense of belonging coexist in South Korea? One plausible explanation would be the prevalence of privately funded private tutors and remedial classes outside school. The data from <Table 3> shows that Korea and Japan have remarkably high participation of educational courses outside school. Interestingly, the inclusion of private tutors reduced Japan's participation to 17.3% while maintained the Korean numbers to rank first at 57.5%.

The low assessment of Korean teachers as shown in <Table 4>, adds to the possibility that high scholastic achievement scores received by students should be attributed to private tutors rather than their schools. In <table4>, students were asked to indicate the frequency with which teachers in the language of assessment show an interest in every student's learning, give students an opportunity to express opinions, help students with their work, and continue to teach until students understand. Values above the OECD average, set to 0, indicate higher than average student perceptions that teachers are supportive, while negative values indicate below-average student perceptions of teachers' supportiveness. Korean students report the lowest support(-0.67) from their teacher.

Table 3. Student participation in educational courses outside school

(Unit: Ranking out of 26, Percentage)

	Korea	Japan	U. S.	U. K.	France	Germany	Sweden	Canada	Italy	Mexico	OECD
Average ranking	2	1	8	13	N. A.	20	21	18	24	3	
Participation ³	63.6%	70.7%	24.7%	20.1%	N. A.	10.4%	7.8%	14.4%	5.6%	51.4%	24.9%
Average ranking	1	21	18	19	N. A.	11	16	14	4	6	
Participation ⁴	57.5%	17.3%	28.8%	24.4%	N. A.	36.2%	7.8%	31.6%	48.0%	47.1%	32.3%

Source: OECD "Knowledge and Skill for Life", PISA 2000.

¹ Percent of students in each OECD country who have a low sense of belonging

² Percent of students in each OECD country with low participation at school

³ Percent of students who have sometimes or regularly attended courses in the language of assessment, courses in other subjects, or extension or additional courses in the last three years

⁴ Percent of students who have sometimes or regularly attend courses in the language of assessment, remedial courses in other subjects, training to improve study skills or private tutoring in the last three years

Table 4. Teacher Evaluation

(Unit: Ranking out of 27, WARM estimator⁵)

		Korea	Japan	U. S.	U. K.	France	Germany	Sweden	Canada	Italy	Mexico	OECD
By Student ¹⁶	Ranking	27	18	4	1	19	24	7	6	21	13	
	Mean	-0.67	-0.17	0.34	0.50	-0.20	-0.34	0.21	0.31	-0.28	0.07	0.00
By Principle ²⁷	Ranking	26	10	18	13	N. A.	16	5	11	25	3	
	Mean	-0.72	0.14	-0.04	0.02	N. A.	-0.01	0.34	0.08	-0.69	0.39	0.00

Source: OECD "Knowledge and Skill for Life", PISA 2000

In addition, school principals were asked to provide their views on teachers' morale and commitment. To do so, they were asked to indicate how strongly they agreed or disagreed with statement such as "teachers work with enthusiasm," "teachers take pride in this school," and "the morale of teachers in this school is high." In the case of Korea, teachers comparatively have the lowest levels of morale and commitment by the standards of school principals.

3. Performance-Management in Education

A. Performance Monitoring⁸

The Central Education Research Center conducted two nationwide scholastic achievement assessments in 1959 and 1963, evaluating 5% of 5th and 6th grade elementary students. This helped identify and solve problems associated with teaching, improve the curriculum, and collect fundamental resources necessary to encourage learning. Consequently, in preparation for the middle school "admission without examination" policy of 1969, the Central Education Research Center conducted the "basic scholastic assessment for primary school" to test changes in the scholastic ability of elementary students. In this test, 300 classes composed of elementary students from 1st to 6th grades were tested in Korean, Math, Social Science, and Science. The results of the assessment were compared and analyzed by region, grade, sex, and scholastic ability

⁵ The index was scaled using a weighted maximum likelihood estimate, using a one-parameter item response model (referred to as a WARM estimator; see Warm, 1985 with three stages: A). The question parameters were estimated from equal-sized subsamples of students from each OECD country. B) The estimates were computed for all students and all schools by anchoring the question parameters obtained in the proceeding step. C) The indices were then standardized so that the mean of the index value for the OECD student population was zero and the standard deviation was one (countries being given equal weight in the standardization process) It is important to not that negative values in an index do not necessarily imply that students responded negatively to the underlying questions. A negative value merely indicates that a group of students (or all students, collectively, in a single country) or principles responded less positively than all students or principles did on average across OECD countries. Likewise, a positive value on an index indicates that a group of students or principals responded more favorably, or more positively, than students or principals did, on average, in OECD countries.

⁶ Index of teacher support and performance on the combined reading literacy scale, by national quarters of index

⁷ Index of principals' perception of teachers' morale and commitment and performance on the combined reading literacy scale

⁸ This section is heavily drawn from Lee, Myung-Hee (2000).

by calculating their average and standard deviation. Furthermore, areas that were affected by the “admission without examination” policy – Seoul, Pusan, and Daegu – were analyzed separately.

In 1974, The Korea Education Development Institute began the “Elementary and Middle School Scholastic Assessment” intended for 1% of elementary and middle school students nationwide to evaluate the efficiency in education efforts such as the curriculum and the education methodology and to collect data for future plans. In 1977, in preparation for the nine-year mandatory education program, they conducted the “Elementary and Middle School Scholastic Assessment” to further understand students’ family conditions, school life, and scholastic ability. In 1980, to assess the effectiveness of the new academic system – fifth academic curriculum – primary education assessments were held. Again in 1983, 1984, and in 1985, multiple evaluations of the new academic system were administered to compare and analyze for future development of academic curriculum.

Moreover, in 1973 and in 1980, the Korean Institute for Research in the Behavioral Sciences (KIRBS) oversaw the “Nationwide Evaluation of Korean Education” and the “Evaluation of Korean Primary Education” to survey the academic ability of elementary students. By evaluating Korea’s mandatory education, they were able to produce an analysis of education funding, which was intended to improve the quality of education in the forthcoming academic systems.

With the establishment of the National Institute for Education Evaluation, scholastic achievement surveys were administered in greater scope and at a national level. From 1986 to 1992, 1% of all Korean primary and secondary students per grade were assessed; from 1993 to 1997, all students were tested. The assessments administered by the National Institute for Education Evaluation sought to collect and analyze the effects, quality, and level of primary and secondary education from a national level, understand the students, teachers, and other factors that influence scholastic achievement, and finally develop top-notch academic materials to be distributed and utilized for teaching at schools. Although the same institution conducted these evaluations, variations in academic years, curriculum, scope, and content have made it impossible to obtain long-term trends from these surveys.

Korean scholastic achievement tests were administered to understand the academic level and to assess the curriculum and pedagogical methodology of primary and secondary school students. However, it is striking that such national-level test does not directly influence the accountability of primary and secondary education.

In the case of England, tests such as the Standard Assessment Test (SAT) and the General Certificates of Secondary Education (GCSE) have functioned to survey national goals and check for accountability by school or by region. In the U.S., the National Assessment of Education Progress (NAEP) has been analyzed to evaluate student performance by state.

However, Korea still does not possess a concrete scholastic achievement system that is operated at a national level. Furthermore, surveys conducted by the Central Education Research Center, KIRBS, and the National Institute for Education Evaluation have not functioned to receive substantial feedback and to maintain a nationwide quality. Hence, future assessments must focus on the implementation of education policies from the level of the city and provincial office of education. In addition, evaluations must be modified to objectively assess and monitor education performance of individual schools to understand the scholastic achievement from a national level.

B. Project Evaluations

Project evaluations in the Korean education sector refer to the progress in implementing education policies and their assessments, such as the “City and provincial Office of Education Evaluation” and “Primary and Secondary School Evaluation.” Although these assessments are not exactly performance evaluations, the goals outlined by these surveys show that they are, in general, project evaluations.

The background behind the introduction of the “City and provincial Office of Education Evaluation” lies in the progress of introducing the “Institution Evaluation System,” enforcing the “Autonomy on Regional Education,” and promoting the “May 31st Education Reforms” (Kong, Eun-Bae et al., 2002). According to the manual of the “City and provincial Office of Education Evaluation,” the goal of these assessments was to strengthen the accountability of the city and provincial offices of education given by their autonomy. In other words, the implementation of the “Autonomy on Regional Education,” the increase in autonomy and decentralization from the ministry of education, and the transition from the “Regional Education Subsidy Distribution System” to the “Total Distribution System” have raised the issue of accountability. Moreover, the necessity of increasing competition among suppliers of education to meet the demands of the education system as outlined in the reform agenda of May 31, 1995 have resulted in connecting the outcomes of the “City and provincial Office of Education Evaluations” to the amount of funding. The idea behind this was to increase the quality of education and to promote education reforms.

The “City and provincial Office of Education Evaluation” (henceforth “office evaluations”) and “Primary and Secondary School Evaluation” (henceforth “school evaluations”) have their legal basis from Article IX Clause 2 of the “Primary and Secondary Education Law” and intended for regional-administrative institutions (usually city and provincial offices of education) and national, public, and private primary and secondary schools. The standard stated in the “Enforcement Ordinance on Primary and Secondary Education Law” includes the composition and application of funds, construction of schools and educational facilities, organization of the curriculum, and personnel maintenance and welfare. Article IX Clause 2 of the “Primary and Secondary Education Law” explicitly states “the execution of school and institution evaluations for an efficient accomplishment of education administration.” More specifically, office evaluations were introduced to bring about favorable competition between city and provincial offices of education, promoting accountability, increase in the quality of education, and raise voluntary efforts caused by the financial-support system of the government (Kong, Eun-Bae, 2002). Hence, office evaluations have the following goals: evaluating the process of implementing policies, nationalizing regional differences, increasing education quality through autonomous competition, providing information regarding the distribution of resources, and proliferating excellent cases of administrative methods (Kong, Eun-Bae, 2002).

There are two goals for school evaluations.⁹ First, it provokes accountability generated from the increase in autonomy for school management. Second, it provides feedback and guidance for various educational activities and maintenance facilities. Thus, it functions to boost efficiency and effectiveness. Finally, the disclosed information provided by the assessment gives consumers of education a better idea about each school’s pedagogical activities and management programs to select schools, teachers, and courses. However, as indicated by Baek, Sun-Gun (2003), most office and school evaluations focus on achieving only the second goal outlined above.

“City and provincial Office of Education Evaluation” (office evaluation)

⁹ This paragraph is based heavily from Baek, Sun-Geun, 1997 and KEDI, 2003.

As of 2003, the office evaluation has been conducted 6 times since its introduction in 1996 (administered every year from 1996 to 1999 and biennially afterwards). Office evaluations have been conducted to “expedite efficient education administration,” increasing school accountability, and raising issues relating to the quality of education.

As demonstrated in <Table 5>, the areas of evaluation are quite comprehensive, but different each time the test is administered. The vast scope of evaluating standards dictated in the “Enforcement Ordinance of Primary and Secondary Law” and the ability of the Minister of Education and Human Resource Development to include items at his will could lead to differences in testing areas and distribution. As a result, areas of assessment, content, and distribution have in fact changed over the years and have led to problems in its consistency. Furthermore, taking regional differences into consideration, evaluations are conducted by city and province. In addition, as described in <Table 6>, evaluation results are disclosed and categorized according to score and linked to government funding depending on their performance.

Table 5. Areas of Assessment, Number of Subjects and Items, and Distribution of the Office Evaluation

Round (Year)	Areas of Assessment	Number of Subjects	Number of Items	Distribution (City/Province)	Total Points
1 st Round (1996)	<ul style="list-style-type: none"> ● Education Policy ● Education Reform 	7 15	25 50	100 100	200
2 nd Round (1997)	<ul style="list-style-type: none"> ● Class Reform ● Demand-Based School System ● Embodiment of Welfare ● Efficiency in Information and Distribution of Administrative and Financial Support System ● Will to Promote Education Reform 	9 4 5 4 5	40 19 24 19 17	200 110 130 120 140	700
3 rd Round (1998)	<ul style="list-style-type: none"> ● Classroom Innovation ● Efficiency in Operating Finances ● Demand-Based School System ● Strengthening the Support System 	3 4 3 5	43 16 12 18	130 130 120 120	500
4 th Round (1999)	<ul style="list-style-type: none"> ● New School Culture to Improve Classes ● Performance-Based Teachers ● Student and Parent-Based School ● Efficiency in Operating Finances ● Strengthening the Support System 	3 4 4 4 City:4/Province:5	39 18 20 19 33/40	160 60 140/115 100 140/165	600
5 th Round (2001)	<ul style="list-style-type: none"> ● Major National Policy Project ● Autonomy and Special Projects of the City or Regional Office of Education ● General Policy Project 	2 3 10	13 6 17	165 125 210	500

Source: Kong, Eun-Bae (2002), p.30.

Table 6. Budget Distributed According to the Results of the Office Evaluation

(Units: Hundred Million Won)

	1996	1997	1998	1999	2001	Total Amount Subsidized	
Total Subsidized Budget	500	800	1,500	1,500	1,000	5,300	
Basic/Difference	250/250	100/700	150/1,350	150/1,350	200/800	-	
City Average	33.63	52.76	82.35	82.35	67.09	305.83	
Provincial Average	33.13	53.71	102.62	102.62	58.93	351.02	
Total Average	33.33	53.33	93.75	93.75	62.5	331.25	
Maximum	57.36	99.53	171.54	140.436	89.43	496.81	
Minimum	17.04	24.49	27.56	41.71	46.87	202.59	
Basis for Distribution	- Basic allotment (50%) + Allotment by Project (40%) + best Office of Education (10%) - 1 billion Won distributed to each office of education as basic allotment and remaining 10 billion Won according to the Index of Basic Allotment = Student (50%) + Number of Students (50%) - 5 billion Won subsidy increase	- Basic Allotment (12.5%) + Allotment by Total Score Obtained (40%) + outstanding Office of Education (45%) + overall outstanding Office of Education (2.5%) - Index of Basic Allotment = Student (50%) + Number of Students (50%) - 80 billion Won subsidy increase	- Basic allotment (13.3%) + Allotment by Total Score Obtained (50.7%) + Allotment to the overall outstanding Office of Education (2.7%) - Index of Basic Allotment = Student (50%) + Number of Students (50%) - 50 billion Won subsidy increase + special subsidy of 100 billion Won	- Basic allotment (10%) + Allotment by Total Score Obtained (40%) + Allotment to an outstanding Office of Education (50%) - Index of Basic Allotment = Student (50%) + Number of Students (50%)	- Basic Allotment (20%) + Allotment by Total Score Obtained (80%) - Index of Basic Allotment = Student (80%)		

Source: Office Evaluation Committee (for each year), "Report on City and provincial Office of Education Evaluation" and KEDI (2002), "Research on the City and provincial Office of Education Evaluation System and Methods for Improvement"

"Primary and Secondary Education Evaluation" (School Evaluation)

There are three types of school evaluations: surveys conducted by the Korea Education Development Institute under the request of the Ministry of Education and Human Resource Development, tests conducted by the city and provincial offices of education, and assessments as part of office evaluations. Surveys supervised by the Ministry of Education and Human Resource Development are conducted by visiting individual schools to identify the conditions – geared toward improving school quality, ameliorating the quality intended by school evaluations, identifying problematic conducts of education, and providing a measure of scholastic achievement and school

satisfaction. In other words, this assessment identifies the current status of the individual school from a national level, examines the effects of policies implemented by the government at a grass-roots level, and fosters the exchange of information between teachers, schools, and research centers with the results produced by the ministry (Baek, Sun-Gun, 2003).

Table 7. Areas of Assessment and Contents of the School Evaluation Conducted by the Ministry of Education and Human Resource Development

Area Assessed	Research Content
Curriculum / Pedagogical Activity	Instruction through an emphasis on educational goals Pedagogical activity that reflects student characteristic Pedagogical activity that develops voluntary study skills
Pedagogical Activity Outside the Curriculum	Searching and discovering one's specialties Livelihood guidance / basic attitude toward democracy
Activities that Support Education	Disguising duty, communication, animosity among coworkers Assisting the development of a faithful environment. Elevating the specialties of the personnel Resources necessary to conduct educational activities Amicable communication between the school and parents and parent participation at school. Supporting and Utilizing regional resources
Scholastic Achievement	Studying methods Communication skills Logic and creativity Relationship with adults Ego-identity Responsibility
Satisfaction	Students Parents Teachers and administrators
Education Policy	Degree of difficulty involved when administering the 7 th Curriculum Class utilizing ICT Achievement Test Special ability / aptitude education Reducing students per class School Administration Committee

Source: Ministry of Education and Human Resource Development and Korea Education Development (2003), "Reports on the Results of the Overall School Evaluation," pp.14-17.

Table 8. Contents of the Field Evaluation Conducted by the Ministry of Education and Human Resource Development to Evaluate Schools

Areas of Assessment	Major Questions
Introduction of School	What are the basic characteristics of the school (composition of personnel and surrounding environment)?
Curricular-Educational Activities	Do the personnel of the school agree with the goals and plans? Do the curricular-educational activities reflect each student's specialty (student level, interests, abilities)? Are curricular-educational activities developing voluntary studying skills?
Pedagogical Activities Outside the Curriculum	Are pedagogical activities outside the curriculum adequately exhibiting student skill and potential? Do pedagogical activities outside the curriculum help develop qualities possessed by democratic citizens?
Activities that Support Education	To provide better educational activities, is the school operated and administered efficiently? Is the school working to improve its teaching and quality? Does the school possess necessary facilities in conducting educational activities? Are the parents, school, and the local community cooperating to improve the quality of education?
Education Policy	While supervising the 7 th Curriculum, to what degree has the school faced difficulties? Are ICT-utilizing classes aiding student comprehension? Are special-skill classes helping the development of student quality? Is reducing class size helping to improve the school quality? Is the Student Administration Committee contributing to the democratic management of the school?

Source: Ministry of Education and Human Resource Development and Korea Education Development (2003), "Reports on the Results of the Overall School Evaluation," pp.22.

School evaluations held at the city and provincial offices of education level are conducted periodically every two to three years, using the "Primary and Secondary School Evaluation Manual," of 1997 to inspect the progress of implementing education policies and projects. In addition, these tests are acclimated to the trends and directions of the individual city and provincial offices of education. More specifically, the Seoul Metropolitan Office of Education has the following school-evaluation goals: first, it should trigger the efficiency and the accountability of pedagogical activities, second, it must promote autonomous and creative educational activities to alter the education environment, and third, it should elevate the quality of education by discovering and proliferating an excellent case of educational activity (Seoul Metropolitan Office of Education, 2004). School evaluations administered by the Seoul Metropolitan Office of Education are written and site surveys, composed not of "qualitative tests" but of "effort assessments," measuring the progress of educational activities geared toward students and improvements in lecturing methods.

Table 9. Areas of Assessment and Evaluation Tasks for General Secondary Schools of Seoul Metropolitan Office of Education

Area of Assessment	Distribution	Evaluating Project
Internalizing Character Education based on Family-Related Experiences	160 (16%)	Revitalizing exchange and experience learning Formulating an autonomous living environment Creating a school without violence Promoting thrifty spending and environmental education Internalizing unification education
Education to develop special skills to fulfill dreams	150 (15%)	Activating enlightening activities Invigorating special and unique skills Internalizing science education Systemizing career guidance Strengthening physical education
Sustaining the innovation of classroom and evaluation	290 (29%)	Improvement of class to increase creativity Reforming evaluation to elevate logic and problem-solving skills Establishment of guidance for responsibility to increase ability Promoting effective reading
Developing knowledge and information skills	120 (12%)	Spreading English education Increasing computer skills and educating information-technology ethics Provoke information-utilizing skills for teachers Use and developing a school homepage
Constructing a school community for all to participate	280 (28%)	Promoting an autonomous specialty project for each school Increasing opportunities for parents to join school activities Internalizing the management of the school's administration committee Improving student welfare Developing teachers' specialization and working conditions Enforce an appropriate and efficient budgeting of school funds
5 Areas of Assessment	1,000 (100%)	25 Projects and 25 Items

Source: Seoul Metropolitan Office of Education (2004), "Report of School Evaluation for the 2003 Academic Year," pp. 10~72.

The problems associated with the current office and school evaluations are their ambiguity: the vagueness of their secondary goals (Kong, Eun-Bae, 2002). More specifically, the extravagance of evaluating items and the lack of consistency has also been pointed (Baek, Sun-Geun and Baek Sung-Joon). Moreover, there has been negative feedback regarding the inadequacy in actively using the test results. However, in this case, the problem lies in examining the survey as a source of spreading excellent cases and correcting bottlenecks as a reflux mechanism. Thus, rather than limiting the assessment to disclosing outstanding cases, there must be successive measures under the auspices of the Ministry of Education and Human Resource Development or by a regional office of education. Therefore, through rigorous project evaluations, modifications must be made to the project and its affected budgeting system. For evaluation results to influence the performance-management system, achievement goal and indices must first be developed, while redefining the content and procedure of assessment.

C. Performance-Based Budget

Education budget falls under the jurisdiction of the Ministry of Education and Human Resource Development. The annual revenue for 2004 increased by 6.1% (compared to the annual revenue of 2003) to 4.6235 trillion won of which general-accounting revenue increased by 5.7% to 252.7 billion won and special-accounting revenue increased by 6.1% to 4.3708 billion won (both figures compared to 2003) (Ministry of Education and Human Resource Development, 2004). Annual expenditures were 3.9765 trillion won for central-education finances and 22.4075 trillion won for provincial-education finances (84.9% of total budget).

In the process of producing the education budget, the city and provincial offices of education present their annual revenue and expenditure budgets to the Minister of Education and Human Resource Development. Consequently, the minister analyzes the budget; for cities or provinces that have conspicuous declines in efficiency and financial health, the minister is authorized to order inspections of the respective office of education, disclose all results, and provide guidance and maintenance to retain financial stability (Ministry of Education and Human Resource Development, 2002). Furthermore, to determine whether funds were used according to their respective proposals, evaluations are conducted annually before the distribution of resources to increase transparency, performance, and administrative skills. However, a large portion of the budget is spent on personnel expenses and on school administration, making performance management only possible for policy projects.

The long-term plan of the government is to sustain a sound financial basis, construct performance-based financing, and maximize autonomy and participation (Ministry of Education and Human Resource Development, 2003a). Much attention has been given to the construction of performance-based financing that the government proposed, since it will foster performance analysis and evaluation of financial projects, which will be reflected in the distributed budget.

The forecast for provincial finances look rigid due to projects improving education environment, constructing facilities for the 7th Curriculum, executing the overall policy to improve teaching professions, and promoting information and technology. Moreover, with the implementation of new policies from the current administrating government, difficulties are expected to be forthcoming in the finances of provincial education (Ministry of Education and Human Resource Development, 2003a). Making efficiency and performance-lead finance system the main priority of the provincial education finance, the introduction of performance-based budgeting and its simulation will be conducted (Ministry of Education and Human Resource Development, 2003a). Furthermore, an analytical index of efficient investment on provincial education finances will be developed and applied to promote soundness, efficiency, fairness, investment return, and autonomy for individual schools.

According to the Special-Accounting Education Budgeting Proposal ((Ministry of Education and Human Resource Development, 2003b) to maximize financial management and trigger efficient financial investment of performance-based financing simulation, ten to twenty projects will be selected by each city and provincial offices of education, compose performance index and proposal, which will be used for the following year. In preparation, a budget-assessing committee will be formed to evaluate and analyze financial priorities.

Performance-lead budgeting links projects and resources to performance. By giving autonomy to each division's expenditure and evaluating their performance, they can assess the amount of money that can be distributed. Moreover, by disclosing performance goals and actual results, this method generates transparency and

accountability.

At the moment, there are 27 performance-based budgeting projects administered by the Ministry of Education and Human Resource Development via performance index developed by the Ministry of Budget and Planning. For instance, the goals of the “curricular reform and continued support” project have two goals: implementing a national curriculum and developing specific performance goals and indices to support research related to curricular improvement. Although the Ministry of Education and Human Resource Development planned partial implementation of performance-based budgeting, no specific strategic and performance goals and indices have been developed.

To successfully introduce performance-based budgeting, transparent budgeting and execution, complete disclosure of the entire process, and performance goals and indices must first be developed. However, even with the planned simulation of performance-based budgeting in 2004, the Ministry of Education and Human Resource Development has not even developed a performance index. To include performance-based budgeting to individual schools, an assessing body and evaluating methodology must also be constructed.

Since 1999, the Ministry of Education and Human Resource Development has simulated performance-based budgeting for the “life-long education” project, but did not reap the results it wanted. The difficulty in assimilating an econometric and performance index, unclear achievement results within a fiscal year, and the unwillingness to cooperate to assess school performance by scholastic achievement, academic level per school, and the rates of matriculation and employment, have contributed to its failure. In any case, with high fixed cost associated with the budget of city and provincial offices of education and the Ministry of Education and Human Resource Development there are hopes that performance-based budgeting will be implemented partially for national policy projects and projects at a city and provincial offices of education level.

4. A Call for Paradigm Reform

Primary and secondary school education policies in Korea have focused their efforts to unify the school curriculum and evenly distribute funds rather than managing and improving the performance of education. Their root causes could be found in the equalization policy, which stresses the equal distribution of funds, and the difficulty that follows the assessment of performance in education. However, education, like other public¹⁰ and private sectors, needs to maximize its goals and performance via an efficient allocation of resources.

Hence, this paper proposes the implementation of an “Accountability-Strengthening Program,” which links funds to the achievement of pre-selected goals designed to foster performance in primary and secondary education that will increase student selectivity, maximize efficient fund allocation based on education demands, and diversify the school system and its curriculum. Furthermore, improving the diversity of the education system, increasing the scholastic ability of low-income and low-performing students, and financially rewarding education institutions that have attained the goals set by the government and objectives of the “Accountability-Strengthening Program” are intended for all public and private schools. However, before such programs can be implemented, research pertaining to measuring student achievement and school performance should be

¹⁰ Since the year 2000, the Ministry of Planning and Budget is overseeing the performance-based funding system for institutions capable of implementing such system and is increasing their targets. (Ministry of Planning and Budget, 2001)

conducted to set a standard for assessing school accountability.

A. Elevating the Education Performance Evaluation

Prior to implementing a performance-managing policy that fosters the performance in primary and secondary school education, a methodology that systematically measures student achievement and education performance for each individual school needs to be researched and developed. Hence, creating a standard and methodology to quantitatively assess student achievement, which could be used to calculate individual school performance must first be made. Moreover, the construction of such system must consider the following.

First, student achievement must be assessed via scholastic achievement and character development, because these two are the functions of school education. Furthermore, this paper proposes the implementation of a national or a regional achievement evaluation held periodically. In addition, such evaluation must disclose all results as a way of producing an unbiased and objective survey of school performance. Likewise, a quantitative indicator of character development must be developed and used to assess students periodically; the regional office of education should use the results of such findings to construct new programs to foster character development and support their implementation.

Second, there are three ways of evaluating student achievement: using the absolute achievement, the change in achievement, and the success in improving student achievement, which fell previously below the lowest standard. The first method uses a student's absolute achievement as a basis for evaluating performance for an individual school's education. The second method uses the amount of change in achievement, rather than their absolute values to determine educating performance.¹¹ The third method uses the success or failure of improvement for students whose achievement falls below the lowest standard to assess performance.¹² As to which program a school chooses to participate depends on the type of education program for each school. In the case of primary and secondary public schools in Florida, it incorporates the three methods outlined above.

B. Introducing an “Accountability-Strengthening Program”

This paper proposes the implementation of an “Accountability-Strengthening Program” for all public and private primary and secondary schools receiving government aid. The “Accountability-Strengthening Program” calls for diversifying primary and secondary education, evaluating accountability tests for the diversified education program, and systemizing funds to be rewarded for education programs that are more successful than others, which could be classified into three categories:

- Strengthening accountability through diversifying the school system,
- Strengthening accountability through the improvement of student achievement for students of low-income and low-ability, and
- Strengthening accountability by rewarding institutions that have fulfilled predetermined goals

¹¹ Charter Schools in the US use this method to evaluate school performance.

¹² In the case of the “No Child Left Behind Program” in the US, which began in January 2002, success or failure to improve student achievement make the basis for determining performance, intended for students in the bottom 30%.

Diversifying the school system via strengthening accountability has been restricted as a supplementary issue to other reform agendas, pursued by education reform committees. Thus, the central idea underlying the strengthening of accountability through school-system diversification lies in the increased selectivity of schools for students and the competition among schools, which ultimately leads to improvement of performance of education in schools. The Charter School system in the US and the system outlined in the FKI-CEPRI¹³ report are specific examples of this program. By providing individual schools comprehensive jurisdiction over school management and curriculum, thereby diversifying education, accountability of education is strengthened through enabling¹⁴ student selection. More specifically, by implementing a formula-funding system concurrently with the accountability-strengthening program, funds will be efficiently allocated to schools where students choose attend, increasing primary and secondary education performance.

Furthermore, this paper proposes the implementation of accountability-strengthening program via increasing student-achievement performance for students of low-income and low-ability. This proposal is different from the first, because it is intended for all public and private schools, including charter schools. The focus for this program lies in remedial classes,¹⁵ which will increase the scholastic performance of low-income and low-performing students. Policies for students of low-income are geared toward financial assistance (tuition grants and the provision of meals at school) and only directed toward the extreme poor. Moreover, remedial classes for low-performing students were focused on assisting the extremely poor-performing minority. In other words, programs intended to increase performance for low-income and low-performing students are almost nonexistent.

This paper proposes government provision of assistance for programs geared towards increasing scholastic performance for low-income and low-performing students. In doing so, a systematic research pertaining to improve student performance must be conducted beforehand. The “No Child Left Behind Program” of the US that began in 2002 could be a good case to model. In addition, the government must also provide assistance for remedial programs in each school, geared towards students whose household income and scholastic performance is below a substantial level. Furthermore, schools receiving aid from the government must provide remedial education for low-income and low-performing students;¹⁶ continued government aid must be contingent on the performance of the remedial program.¹⁷ Active student and parent participation must also be considered, and research must also be conducted to attract participants.¹⁸

¹³ The FKI-CEPRI report proposed the implementation of a charter school operating along the following principles: increased student selectivity of schools, provided comprehensive authority over school operation and funds, and issued discriminated government funding contingent upon student size.

¹⁴ Formula Funding is the specification of the “government-discriminated funding system based on student size” often used by charter schools. Formula funding can be divided into four categories – basic student costs, curriculum costs, remedial-educational costs, and school-operation costs – and the calculation involved for each category involve detailed conditions.

¹⁵ Remedial education refers to remedial classes aside from regular courses and livelihood guidance, excluding curriculum guidance.

¹⁶ Because remedial education could be operated separately from regular classes, accountability-strengthening program must be intended for all public and private schools receiving aid from the government.

¹⁷ In the case of the American “No Child Left Behind Program,” direct selection of teachers and curriculum by students and assessment of scholastic improvement have contributed to the strengthening of school accountability.

¹⁸ In a society that stresses academic attainment, students may feel embarrassed to participate in a

Finally, this paper proposes an accountability-strengthening program that utilizes a rewarding system. In this program, individual schools that have accomplished goals outlined by the government to improve education performance will be rewarded to promote school effort to ameliorate their system. More specifically, the government will set achievement goals¹⁹ and recruit schools that want to compete within this condition. Among the participating schools, the government will financially reward the school and its participating members. To strengthen accountability through a rewarding mechanism, this paper proposes the following.

First, regulations pertaining to school affairs should be temporarily exempt for participating schools so that they could conduct various experiments to achieve the goals outlined by the government. If schools are restricted by regulations, their attempts for experimenting will be limited. In other words, the director of a regional education office may function as an exogenous variable, affecting education performance. Thus, a temporary exception for regulations related to school affairs could be implemented in the same manner as charter schools.

In regards to the reward bestowed by the government, there must also be benefits for the members of the school, including teachers and students. Without the active participation of teachers and students, it is difficult to conduct experiments to attain performance goals. Hence, providing direct rewards (incentives)²⁰ will promote the active participation to achieve these goals.

Table 10. Accountability-Strengthening Program

<p>Diversifying the School System to Assess Accountability (for Charter Schools)</p> <ul style="list-style-type: none"> ● Diversifying the school system through the introduction of charter schools. (Guarantee school selectivity, provide autonomous operation rights, and financial assistance through formula funding) ● Test the accountability of the charter school by evaluating its education performance and assessing the possibility of charter extension.
<p>Improving Scholastic Achievement for Low-Income and Low-Performing Students (for all public and Private Schools)</p> <ul style="list-style-type: none"> ● Implement a remedial education program to increase the performance of low-income and low-performing students. ● Implement an achievement-evaluating system to assess the quality of remedial education. ● Test for accountability based on the improvement of student achievement.
<p>Promoting Competition Among Schools via a Rewarding System (for Schools that desire competition)</p> <ul style="list-style-type: none"> ● Government will outline performance goals and recruit schools that want to participate in this competition. ● Bestow autonomous operation rights for schools participating in the competition, comparable to the level provided to charter schools. ● Direct rewards for the school, teacher, and students involved.

program for low-income and low-performing students. (Stigma effect) Thus, to encourage active student participation, direct and indirect incentives must be provided.

¹⁹ The government can choose diverse goals such as improving of scholastic achievement and curriculum, innovating class lectures, and developing character.

²⁰ Rewards for teachers could be a bonus in their salary or additional benefits; for students, scholarship could be considered.

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