

Abstract

**A Study of Innovation Tasks of Teacher Policy
according to Educational Environment (I):
Innovation Tasks on Training and Recruitment
Policy of Teacher**

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□ **Study Outline**

The purpose of this study is to explore and propose the innovation task of teacher policy according to the change of teaching environment. Also, the purpose of this study is to establish the direction of innovation based on the needs of related groups and issues of teacher policy innovation, and the cases of innovation in major countries. This research is carried out over three years, and the study purpose and analysis subject of each year are as follows.

In the first year (2017), focusing on preliminary teachers' entrance to the teaching profession, it address innovation challenges in teacher training and recruitment policies. In the second year (2018) study, we will focus on the competencies of teachers and examined the appropriateness of the personnel system from the viewpoint of whether the training of the teachers and the personnel system are built on the competence required for the teachers according to the changes in the teaching environment. And we will explore innovation directions and challenges. In the final third year, we will focus on allocation and utilization of school-specific teachers who are suitable for the future school operation, and the disparity in supply and demand for teachers due to changes in demand for the future school conditions is expected. So we will examine the appropriateness of teachers supply and allocation plan and explore innovation directions and challenges.

In the first year (2017), there are five research problems that were approached in this study.

First, how is the teacher image changed due to the change of the teaching environment and what is the change of the competency required for the teacher? Second, what are the implications of changes in the teaching environment on teacher policy? What are the areas and issues of teacher policy that innovation is urgently needed? Third, with the changes in the teaching environment, the competence of teachers needed in the field is changing. But, how much is the suitability of the pre-teacher selection process, the training process, and the recruitment process for new teachers at the teacher training college? What are the related groups' need for innovation on innovation issues? Fourth, what are the implications of innovation cases and innovation trends in major countries for Korea? Fifth, what are the directions and tasks of innovation for selection and training of pre-teachers to attract qualified professionals with high proficiency and new teachers recruitment to improve site adaptability?

This study consists of six areas. ① Prospect of change in school education and teacher role analysis according to the change of teaching environment, ② Establishment of innovation area and analysis standard of teacher training and recruitment policy, ③

Diagnose problems and innovation issues of teacher training and recruitment policy, ④ Extracting Innovative Cases and Implications of Major Countries, ⑤ Survey of innovation needs of teacher training and recruitment policy, ⑥ Innovation direction and challenges of teacher training and recruitment policy

Various research methods were applied. ① Literature Research, ② Expert Council, ③ Writing innovation case of major countries, ④ Survey(Primary: Expert E-mail survey, Secondary: Innovation Needs Online Survey), ⑤ Policy Forum, ⑥ Consultation on the practical work of government officials and so on

The research process was divided into three stages. In the first stage, we reviewed the previous study to prospect the change of school education and to analyze the role of teachers in according of the change of teaching environment. Also, Since the 21st century, the direction of school education has been changed in response to changes in teaching environment, and the contents of the role and capacity changes of teachers have been analyzed. In the second stage, we diagnosed on - site suitability of teacher training and recruitment policy and selected the issue of innovation because of the high demand for innovation. In the third stage, the innovation cases in major countries were analyzed to explore the innovation cases of teacher training and recruitment policies. Also, the policy forum was convened to collect the group 's needs related to the innovation task (plan) in this study and opinions of related groups on policy proposals.

❑ Changes in School Education and Teacher Role According to the Change of Teaching Environment

In this chapter, we prospect the transition of the fourth industrial revolution and the changes of teaching environment, analyze how teachers' roles and capacities change in the operation of future schools, and suggest implications for teacher policy innovation.

The analysis results are presented as follows. ① Precedent Study Overview, ② 21st Century Education Model and School Education Change Orientation, ③ Characteristics of

Future School Operation, Teacher Role and Teacher Competency, ④ New Educational Model in the Age of the Fourth Industrial Revolution, ⑤ Implications for Teacher Policy Innovation

In the precedent study overview, the topics and research contents of precedent studies related to the subject of this study are as follows. ① precedent study related to teaching environment, future school change and school innovation, ② precedent study related to teacher's role and capacity change, ③ precedent study related to teacher policy innovation, ④ precedent study related to teacher training and recruitment policy

As a result of analyzing the change of teacher role in future school, students will play a leading role in overall learning and school operation, so that students' role as a partner of school change and development of teacher professional will expand. So, the roles of teachers coaching and consultants who support responsible students' roles have been highlighted. In addition, it was required to check the existing teacher role and demands of the teachers' image change and to redefine the concept. The core competencies required of teachers for the operation of school curriculum are self – management capacity, knowledge information processing capacity, life organizational capacity, creative thinking capacity, psychological emotional capacity, communication capacity, community capacity. It has been confirmed that innovations in teacher training and recruitment policies are required to provide these competencies. The innovations are requirement of dramatic improvement in the selection of pre-teachers, and the demand for reorganization of introducing a competency-based curriculum in the teacher training system. In addition, it is confirmed that restructuring of the training courses related on the student-centered teaching and learning activities that meets the future school system is urgent.

□ Innovation Areas and Analytical Standards of Teacher Training and Recruitment Policy

In this chapter, we present the areas of innovation in teacher training and policy, and

present analytical areas and analytical criteria for exploring innovations in the training and recruitment policies. The analysis area of the training policy consists of the following four areas in connection with the innovation issue. ① Innovation of Selection of Freshmen of Teacher Training University, ② Teacher Training Curriculum Innovation, ③ Education Practice Innovation, ④ Teacher Training System Innovation

The area of teacher recruitment policy consists of the following two areas. ① New Teacher Certification Examination and Recruitment Innovation, ② Principal Recruitment Innovation

The results of the analysis are as follows. ① Areas and Functions of Teacher Policy, ② Characteristics of Innovation and Success Requirements, ③ Innovation areas and analytical standards of teacher training and recruitment policy

As a result of analyzing the scope and function of teacher policy, it was confirmed that teacher policy can not be supported in any area or element because it is closely related with changes in teaching environment. Especially, in an era where the teaching environment is changing rapidly, it is necessary to strategically strengthen the linkage between regions so that they can reflect the change orientation of school education and stressed the need to establish and support systematic and comprehensive measures throughout the teacher policy.

Regarding the classification of the area of teacher policy, it is divided into human resource management perspective and competency development perspective. We view the human resource management perspective as a traditional approach, and the viewpoint of competency development is viewed as an innovative approach to reform teacher policy in terms of adaptation to changes in the teaching environment. In the analysis of the concept and characteristics of innovation, the concept of innovation was defined as 'creating new value to replace current which means a revolutionary way to pursue something better than the past or present'. The innovation tasks in this study are problems to be urgently urged due to high demand for innovation, problems that should be abandoned as obstacles that serve as obstacles to innovation, and improvement in the

new and innovative ways to difficult problems that can not be solved easily or have severe difference with change the requirements of the field.

In this study, four areas of innovation were set up in urgent response to teacher training. These areas are as follows. ① Innovation that Selection of New Students for Teacher Training Schools, ② Teacher Training Curriculum Innovation, ③ Education Practice Innovation, ④ Teacher Training System Innovation

Also, The areas of innovation that are urgently needed in relation to the recruitment of teachers are set as follows. ① New Teacher Certification Examination and Recruitment Innovation, ② Principal Recruitment Innovation

The analysis factors related to the innovation issue are composed of the following five factors. ① Status, ② Problem, ③ Arguments and Issues, ④ Improvement Needs and Plans, ⑤ Innovation Case

The analysis elements related to the innovation task are as follows. ① Problem Situation Overview, ② Problem Causes and Barriers, ③ Responding Urgent Innovation Issues, ④ Innovation Value, ⑤ Need for Innovation(Priority), ⑥ Innovation Task Agreement, ⑦ The Factors of Innovation Challenges

As for the innovation task, it is as follows. ① Innovation Needs and Task Selection Criteria, ② Promotion of Innovation Task

In order to enhance the effectiveness of the policy implementation in the future, the analysis of the innovation task is based on the following factors. ① Policy Goals, ② Promotion Contents, ③ Strategy and method, ④ Expected Effects and Impact on Teaching Profession, ⑤ Prerequisites, ⑥ Propulsion System(Bipartisan Council and so on), ⑦ Timing, ⑧ Law Amendment

□ Teacher Training and Recruitment Policy Problems and Innovation Issues

The analysis of innovation issues related to teacher education policy is divided into four

areas as follows. ① Innovation of Selection of Freshmen of Teacher Training University, ② Teacher Training Curriculum Innovation, ③ Education Practice Innovation, ④ Learning Period and Teacher Training System Innovation

Innovation issues related to teacher recruitment policy are divided into two areas as follows. ① New Teacher Certification Examination and Recruitment Innovation, ② Principal Recruitment Innovation

The contents of innovation issues are as follows. ① Status, ② Key issues presented in Precedent Research, ③ Argument and Issues, ④ Improvement Plan Presented in Precedent Research, ⑤ Innovations Promoted at the Level of the Ministry of Education and College of Education

Analysis on Teacher Training and Recruitment Policy Problems and innovation issues are as follows.

First, the innovation issues related to the selection of students at teacher training colleges were diagnosed as follows. ① Strengthen Competency-based Student Selection Criteria, ② Strengthen Inadequate Selection Criteria, ③ Interview Selection Method Change, ④ Preventing Rush of Students from Having Good Grades, ⑤ Adjust Timing of Selection(Converted to Frequent Screening and so on)

Second, the issues of teacher education curriculum innovation were diagnosed as follows. ① Competency-based Curriculum Reorganization, ② Development of Information Technology and Utilization Capacity, ③ Expanding Support for State-level Leading Business Related to Reconstruction of Training Curriculum, ④ Integration of Elementary and Secondary Curriculum, ⑤ Interdisciplinary Integration and Integrated Instruction, ⑥ Strengthen Linkage between Teaching Profession, Curriculum Contents and Curriculum Education, ⑦ Development of Faculty Competency, ⑧ Facilitate Individual Learning and Activities Based on On-line and Off-line, ⑨ Strengthen Teaching Aptitude and Personality Program

Third, the innovation issues related to teaching practice of teacher training college were diagnosed as follows. ① Expansion of Practice Period, ② Securing Practice School, ③

Quality of Teaching Practice Professors and Teachers, ④ Field Based Practice Program, ⑤ Practice Environment of Practical Training School, ⑥ Establishment of a Linkage System between College of Education, Teaching Practice School and Office of Education

Fourth, the learning period and system innovation of the teacher training college was diagnosed as follows. ① Integration and Coordination between Training Institutions, ② Expanding Opportunities for Competent Staff to Participate in School Education Activities, ③ Expansion of the Training Period to the Master's Level, ④ Establishment of Teacher Training Graduate School, ⑤ Establish a Cooperation Network between the Teacher Training Colleges, ⑥ Reinforcing the System of Cooperation between College of Education, School Field and Office of Education

Fifth, new teacher appointment and recruitment innovation were diagnosed as follows. ① Strengthening the Suitability between Teacher Certification Examination Teaching Profession, ② Change in Management Method of Teacher Certification Examination ③ Change in evaluation method of Teacher Certification Examination(Introduction of Absolute Evaluation in the First Test and so on), ④ New Teacher Recruitment Process Change, ⑤ Preventing Dependence on Private Education Market Preparing for a Teacher Certification Examination, ⑥ Introduction of Intern Teacher System

Finally, the principal recruitment innovations were diagnosed as follows. ① Expanding the Principal Open Recruitment System, ② Strengthening Standards for Qualification of Principal, ③ Established Graduate Level Professional Training Courses, ④ Delegate the Appointment of the Principal to the Superintendent, ⑤ Transition of Principal Appointment Method for Specific Avoidance Areas

□ Examples and Implications of Innovation in Major Countries

Major countries analyzed were the United States, Singapore, Japan, Finland, and Australia. As a result of analyzing the innovation trends of these countries, the innovation policies adopted by each country are based on the details of the policy, such as the past form

of the policy, background factors such as the transition process, And there was a difference between them. Nonetheless, it reflects the inadequacy of the teacher training system, the competitiveness of the talented personnel entering the teacher training institute, the teacher training behavior that is deviated from the theory, the divergence between the teachers training institute and the school site, hiring new recruiting practices that can not be achieved, In order to solve common challenges such as the difficulties, the central government, local governments, teacher education institutes, and schools have actively conceived and implemented innovative self-help measures through linkage and cooperation.

Common features include a comprehensive university system for teacher education and transfer to graduate level, integration of elementary and secondary education functions, reorganization of teacher education curriculum into practice-oriented programs, practical training for linking between education institutions and school sites, selection of talent to be introduced into teaching profession, openness and flexibility of recruitment, and selection method innovation to enhance suitability of new recruitment system.

□ Survey Results of Teacher Training and Recruitment Policy Innovation Needs

In this study, the innovation needs of the related groups were investigated in terms of the innovation issues identified in the teacher training and recruitment policy and the proposed innovation tasks in this research. The related groups consisted of 1,340 including teachers from various schools, professors from teacher training schools, offices of education and Ministry of Education, and teacher policy experts. The survey method was an online survey. A response-specific website (URL) was created and responded to by a respondent. The questionnaire was conducted by a survey company. The survey period was from September 7 to 22, 2017, for about two weeks. The survey response rate was 671 respondents and 50.1% response rate.

The survey area consists of the following three areas besides the general area. ① Field Suitability of Teacher Training and Recruitment Policy, ② Need for Innovation of Teacher Training and Recruitment Policy, ③ Innovation Challenges in Teacher Training and Recruitment Policy

The survey results are divided into the outline of needs survey, the results of needs survey, and implications for the search for innovation tasks. The characteristics of the survey are as follows.

First, in terms of teacher training, the Teacher Training College's curriculum has the lowest suitability and the innovation demand is very high. The innovation value that should be oriented in the curriculum of the teacher training college was professionalism, and the innovation task with the highest degree of agreement was the teaching proficiency / personality guidance program.

Second, in the case of teacher certification examination and recruiting of new teachers innovation was the second most urgent. In the new teacher recruiting and teacher certification examination innovation, the most important factor to consider was teaching (field) suitability and the innovation task with the highest level of consensus appeared to be strengthening the appropriateness of the teacher certification examination.

Third, in the case of principals training and recruitment, in particular, the criteria for the qualification of principal and methods fitness were very low, and the degree of innovation need and urgent innovation was relatively high. The core values to be addressed in the field of training and recruiting principals were professionalism in terms of qualifications, fairness in terms of recruitment methods and procedures. The innovation task with the highest degree of agreement was the shift in the way principals were recruited for specific avoid areas.

□ Innovation Direction and Challenges of Teacher Training and Recruitment Policy

In the process of exploring the innovation tasks of teacher training and recruitment policy, the perspectives and strategies of approach to innovation were presented, and innovation tasks were presented for each innovation area. Innovation tasks are divided into teacher training and recruitment policy areas. Innovation tasks are presented as a response to the six innovation issues analyzed in the previous chapter as sub-domains of each domain. The innovation task was divided into 'innovation demand and task selection argument' and 'innovation task action plan'. In the case of the innovation demand and the selection of the task, it is presented in connection with the results of the demand survey in this study focusing on the reason for the innovation and in the case of the selection of the task, the suggestion of the scholars in connection with the innovation demand and the policy of the government were presented.

The innovation strategy in this study was set as follows. ① Diagnose Innovation Issues Based on Innovation Needs, ② Create New Innovation Value and Eliminate Obstacles to Innovation, ③ Establish Sustainable Innovation Management System, ④ Establishment of Cooperative Network of Teacher Policy-related Groups

Also, in terms of innovation orientation, the following perspectives were established. ① Enhancement of Site Adaptation in Teaching Introductory Course, ② Innovating Teacher Training Curriculum Focused on Global Competency, ③ Linking Training Institutes with the Unit School Curriculum, ④ Establishment of Teacher Training and Recruitment Plan in connection with Changes in the Demand of the Field, ⑤ Competency-centered Teacher Training and Recruitment Innovation

Based on the demand and direction of change at the field and national levels, the innovation areas of teacher training and recruitment policies are composed of the following points in view of the innovation issues identified in Chapter 4. In the area of teacher training policy, ① Selection of New Students at Teacher Training Universities, ②

Curriculum Innovation of Teacher Training College, ③ Innovation of Teaching Practice of Teacher Training University, ④ Teacher Training System Innovation

In the employment policy area, ① New Teacher Certification Examination and Recruitment Innovation, ② Principal Recruitment Innovation

Innovation tasks are divided into short-term and midway. We selected two short-term and two long-term projects reflecting the level of consent of each innovation task in this study. The important tasks that need to be urgently implemented with high demands for innovation are presented as short-term tasks and in the case of the new scheme, the issues that need to be investigated and the basis of the consensus of the related groups are presented as medium- and long-term tasks. In the case of teacher training system innovation, it is necessary to provide a basis for discussion on the innovation system of the positive system. Therefore, one short term project and two long term projects are presented.

In the area of selection of new students for teacher training universities, the short-term tasks are ① Improve Interview Selection Method, ② Improvement of Selection System to Prevent Rush of Students with Good Grades, and medium- and long-term task is Transition to competency-centered student selection system. In the curriculum innovation of the teacher training college, the short-term tasks are ① Strengthen Teaching Aptitudes and Personality Programs, ② Strengthen Linkage of Teaching, Curriculum Contents and Curriculum Education, and medium- and long-term tasks are ① Competency-based Curriculum Reorganization, ② Strengthening the Development of Faculty Capacity.

In the field of innovation of teaching practice in teacher training course, the short-term tasks are ① Site-Friendly Type Periodic Training Practice Monitoring, ② Joint Development of Teaching Practice Manual between Teacher Training Institute and Practical Training School, and medium- and long-term tasks are ① Expansion of Training Practice Period, ② Establish and Operate Teaching Practice Center.

In the area of teacher education system innovation, the short-term task is Establishment of cooperative network of teacher education institutes, national research institutes and unit schools, and medium-and long-term tasks are ① Establishment and operation of teacher training college – tentatively Teacher's College – centered on teaching academy, ② Establishment of Teacher Graduate School.

Also, In the area of new teacher certification examination and recruiting innovation, the short-term tasks are ① Regularization of Medium-and Long-term Teacher Supply-demand Plan and Rationalization of New Recruitment Plan, ② Improve the Process of Establishing a New Recruitment Plan, and medium-and long-term tasks are ① Centered on Practical Capacity, Turned into a System of Appointment Examination by the Office of Education, ② Promotion of Linkage between Teacher Training and Appointment Test.

Finally, in the area of principal training and recruiting innovation, the short-term tasks are ① Expanding the Principal Open Recruitment System, ② Conversion of the Principal Appointment Method of a Specific Avoidance Area, and medium-and long-term tasks are ① Strengthening Standards for Qualification of Principal, ② Established Graduate Level Professional Training Courses.

Key words: Changes in Teaching Environment, Teacher Policy, Teacher Training, Teacher Recruitment, Innovation Challenge