

Establishing the Future Model of Teacher Training Reflected the Future Educational

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Abstract—The purpose of this study was to develop the future model of teacher training. Research method was literature review. In order to fulfill the conditions of experimental proof, the study has been contemplated on the limitation of the existing six traditional perspectives of teacher training. In addition, the study analyzed theoretical and practical discussions of the future education's paradigm from previous studies. Therefore, the study has brought the implications that the new model of teacher training requires artistic and technological approaches to understand, explain, and analyze such new phenomenon in educational field. Based on the study result, the future model of teacher training was established. The three key factors are 'technology', 'art', 'networking'. This model's purpose is to raise teachers who can improve professionalism through various and strong networking with understanding artistic traits of education and grafting technology onto the classes. Subsequently, this model's contents, methods and educational system were suggested.

Index Terms—teacher training model, future educational paradigm, art, technology, social networking

I. INTRODUCTION

The ability required to teachers have been various by the change of the age [1], [2]. And the change of the age makes different teacher's role, and educational paradigm [3]-[7]. It means that the teacher's role is no more only than teaching students, they should do something others. And there are many studies related to what is teacher's role, and how training the teachers reflected the future paradigm.

We need to focus on the change of teacher's role affected by the change of educational paradigm. And it is time to discuss new model for teacher education reflected current trends.

Traditionally, teacher's role was "Knowledge deliver". And, teacher education program consists of objective knowledge. The important thing for teachers was delivering what they have known. However, in the future, teacher education program needs to be changed [8]. Because the pace of social change will gradually increase, and there will be uncertainty, complexity, and unpredictability in the future society [9]. Change of age means that the society needs different style of talent person. So we have to cultivate and teach students in different style of education [8], [10].

Also, there will be wicked problem in the future society [9]. According to Kim (2014) [11], wicked problem means that difficult or impossible to be solved because of its incomplete and contradictory traits and changing requirements that are often difficult to be recognized. In the future society, there will be no simpler problem, and we have to deal with esoteric problems instead. So, in the future, society will require men and women who can apply their knowledge to real phenomenon, and having practical, it means problem-solving ability. With regard to this, two research questions were suggested.

First, what is theoretical and practical discussion for the future educational paradigm?

Second, what is the future model of teacher education reflects the future educational paradigm?

TABLE I. THE CHANGE OF EDUCATION PARADIGM (KIM, 2000)

	Traditional education paradigm	New education paradigm
View of knowledge	Absolute knowledge	Relative knowledge
Purpose of education	Acquiring knowledge	Applying knowledge Utilizing knowledge
Content of education	Propositional knowledge Abstract knowledge	Practical knowledge
Method of education	Teacher as a 'Knowledge deliver' Teacher-centered teaching Lecture method instruction	Teacher as a 'Guide' Student-centered learning Discussion courses

II. BACKGROUND

A. Theoretical Discussions for New Paradigm: The Change of Educational Paradigm

According to Kim (2000) [6], education paradigm has changed. Specifically, the range of view of knowledge, purpose of knowledge, content of education and method of education has been changed. The change of education paradigm is shown in Table I.

The present time, the change of teacher education is not a simple reformation but the whole revolutionary reform [6]. For the change of teacher education, we have to consider future educational paradigm. In this situation, the research and discussion on teacher education paradigm are very important [6].

B. Practical Discussions for New Paradigm

1) Smart-phone film-making instruction method in SNU

Smart-phone film-making instruction method has been used in Seoul National University in Korea and the class name is <Teaching and Teacher>. Jin at all [9], [12] explore the possibilities of education through smart-phone film making for pre-service teachers. They designed one semester course, and the students who are in the class had various experiences.

According to Jin (2013) [9], [12], this method enhances fervor, ability of interaction, synthetic thinking faculty required in future society. The students' cognitive, emotional, and social skills have been encouraged through learning process. Jin said that smart-phone film making method boosts various factor of teacher competencies such as communication skill, creativity, imagination, and insight.

This means that smart-phone film making as a method of teacher education have much merit for future teacher education. Also they suggest the possibility of combination between education and arts [9], [12].

2) Cloud education

Cloud education is the learning system that free from time and space restrict. It exercises virtual experience, collective intelligence, and other various ways. Through this way, students can help each other's learning activity. And the learners can design their own learning process actively.

In this method, learner design the learning course by themselves. They reflect their learning purpose and ambitious to learning course, and could find the value of learning by themselves. Students take an active part in the process, and they are being as a lively existence.

3) Flipped learning

Flipped learning is opposite way of traditional teaching style using TED, MOOCs (Massive Open Online Courses), and so on. Flipped learning could get much interest from student because of its process which involving student actively. Through this learning system, students are encouraged to involving in class, so the teachers could accomplish the current educational policy that emphasizes self-directed learning [13].

Giving an explanation specifically about Flipped learning, before the class, teachers provide online lesson program or videos related with class. Students could prepare tomorrow's lesson by themselves.

During class time, individualized supplementary or in-depth study is conducted on the basis of the students' prior learning [13]. Teachers could spend whole time for interacting with students concretely without wasting time for explaining main idea. And students also get much time to communicate with teacher or other students. In this way, teachers could encourage students' participation to the class.

III. RESULT

These results are extracted from theoretical and practical discussions related to the future educational paradigm. Based on the preview of previous studies, in

this research, Fig. 1 is suggested to the future teacher education model.

For establishing future teacher educational model, we process three steps course. First of all, we choose three key factors which are vital element in future teacher educational model. These three factors is indispensable with teachers when they give lessons in future.

Second step is setting the goal. The purpose of the future teacher training model is different from current model. After choosing three basic competence that future teacher have to contain essentially, we suggest the purpose of the future teacher training model.

Lastly, based on previous steps, we suggest to way of teacher training system supplementally. Those are 4-1 system and 4-2 system. Pre-teacher could get familiar with practical educational environment with 4-1 system. And 4-2 system has a benefit to attract people who have various experience, background. However, these two systems are alternative system to current Korean teacher training course. So they are considered and suggested based on current Korean culture.

A. Three Key Factors of the Future Teacher Training Model

For establishing the future teacher training model, we choose three core elements, 'Technology', 'Art', and 'Networking'. These three factors are very important in future teacher training course.

1) Technology

From practical discussions, we can extract 'Technology', 'Art' and 'Networking' as one of the fundamentally elements in teacher training course. In smart-phone film making method, students make film by their smart-phone which contains high technology. Students can shoot a movie by their smart-phone, and edit scenes by their smart-phone. They also show their movie by using their technological equipment.

In cloud education and flipped learning method, 'Technology' is necessary element too. Student prepares class with online program, and they can search and get more information by technological devices.

2) Art

'Art' is also important factor for future teacher training. There are complex and unexpected problem in future society. For handling these esoteric problem, creativity and flexibility are needed. And through the class which using art, students could raise their artistic aspect.

'Art' make complex situation more simpler, and make boring situation more curiously. There are many artistic part in class, so teacher could make their class more plentiful by using artistic methods.

3) Networking

'Networking' means that more interaction chances are needed to provide for pre-teacher. Pre-teachers are trained for being a teacher in university class by book. However they scarcely experience practical environment. So pre-teacher needs to meet teacher, exterior experts and professor frequently, and interact with them to the maximum. Not only the relationship between pre-teacher and others, but also the relationship between professor, teacher, and exterior experts is very important. So, for

future teacher training, there will be more opportunity to interact between pre-teacher, teacher, exterior experts, and professor.

B. The Purpose of the Future Teacher Training Model

Setting goal of the future teacher training is significant process. Because after setting goal, we can design detailed process under the purpose of future teacher training.

Three key factors are should be considered when you setting purpose of future teacher training. As commented above, 'Technology', 'Art', 'Networking' is essential element for teacher. After choosing three basic competences that future teacher has to contain essentially, we suggest the purpose of the future teacher training model. Here is the purpose of the future teacher training based on three key factors.

The purpose of the future teacher training is to raise a teacher who can improve their profession through various networking with understanding artistic traits and adhering technology to design classes.

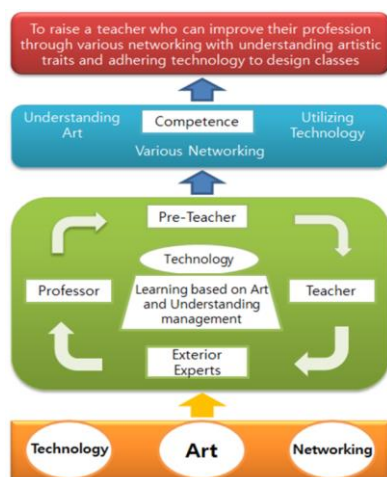


Figure 1. Future teacher education model

C. Available Teacher Training Systems

Also, we suggest two way of teacher training system. However, these two systems are alternative system to current Korean teacher training course. So keep in mind that they are considered and suggested based on current Korean culture.

1) 4-1 System

First, 4-1 System. Based on existing system (4 year course), adding internship course (1 year) is needed. To be a teacher, pre-teachers are demanded to possess some professional ability. However, pre-teacher cannot be trained enough in existing curriculum.

One of the most serious problem is pre-teacher cannot get many chances to interact with practical environment. Because they learn everything about school from book, they don't know what happens in school. So internship course is integral to pre-teachers. During the internship courses, pre-teachers could get familiar with classes, students, and teaching program.

2) 4-2 System

Second, 4-2 System. Separating from existing system (4 year course), we can train teachers by graduate school program (about 2 years) like law school system. Current system which raising teacher is too exclusive. Unless someone major education in university, it is difficult to get a chance to be a teacher in Korea.

4-2 system could overcome this limitation. In this system, someone who discovers his eager to be a teacher after graduating university, he gets a new chance by entering graduate school program. So, this 4-2 system has a benefit to attract people who have various experiences, or backgrounds.

IV. CONCLUSION AND DISCUSSION

The purpose of this study was to develop the future model of teacher training. For that, this study analyzed theoretical and practical discussions of the future education's paradigm from previous studies.

Based on the study result, the future model of teacher training was established. First of all, we choose three key factors that are fundamental to future teacher. These three factors is indispensable with teachers when they give lessens in future. The three key factors are 'technology', 'art', 'networking'.

After choosing three basic competences that future teacher has to contain essentially, we suggest the purpose of the future teacher training model. This model's purpose is to raise teachers who can improve professionalism through various and strong networking with understanding artistic traits of education and grafting technology onto the classes.

Lastly, based on previous steps, we suggest two way of teacher training system. Those are 4-1 system and 4-2 system. During the internship courses, pre-teachers could get familiar with classes, students, and teaching program. And 4-2 system has a benefit to attract people who have various experiences, background.

Through the future teacher training model reflected the future educational paradigm, we can expect that the future teachers fulfill new teachers' roles required in the future society, such as problem solving ability, creativity and ICT using ability etc.

To reach this purpose, policy makers should recognize the change of society and make decisions for developing teacher training programs. Additionally, they have to overcome closeness which was traditional trait of teacher training model and pursue openness to make partnership with exterior experts who have various talent and knowledge for making stronger networking among educators.

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