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Making our schools more creative: Korea's efforts and challenges

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The Korean government has been interested in developing creativity in education and has attempted to increase the creativity of schools since the mid-1990s. This study critically reviews the efforts of the Korean Government over the past 20 years. The study analyses government documents and related department website materials published since mid-1990s when creativity emerged as a key agenda in Korean education policy. The results reveal that the government's endeavours for achieving creativity include increasing flexibility in the national curriculum, developing teachers' creativity by improving teacher education, and establishing supporting systems such as online information websites and teaching and learning materials. However, these efforts have not achieved a real transformation in schools. For the government to achieve its aims, this study recommends that it supports an emphasis on creativity in school subjects and supports teacher-driven development of teaching materials.

Keywords: creativity in education; creative school environment; Korean education; education policy

INTRODUCTION

Fostering creativity is a fundamental objective of national education policy worldwide, driven by the unprecedented economic, technological, social, and personal challenges of the 21st Century (NACCCE, 1999). In Korea, too, fostering creativity is being emphasized, particularly, as a key to solving the crisis in education. According to PISA (Programme for International Student Assessment) results, indexes of the affective domain, such as students' attribute factor and their degree of happiness, are relatively low, even though Korean student achieve excellent academic results (OECD, 2014; So & Kang, 2014). This means that, although Korean education has successfully produced brilliant students, it has failed to develop in them a desire to learn and to develop their own aptitude. Fostering increased creativity may be a key to solving these problems, because creativity makes learning interesting and dynamic (Mindham, 2004) and, therefore, the Korean Government introduced "the 5-31 Educational Reform Plan", a milestone in the current Korea education system which aims "to raise a creative person" (Choi et al., 2011). In the context of the plan, there have been a number of policies to increase student creativity in the past 20 years.

Success in the aims of the policies, however, depends upon supportive conditions (Azzam, 2009; Dobbins, 2009; Prentice, 2000); that is, depends upon schools having an environment that is supportive of creativity.

This study critically reviews the level of success of the Korean government's education policy for creativity and makes recommendations for future policies to improve policy outcomes.

THEORETICAL FRAMEWORK

The focus on creativity in education is not a recent innovation (Sæbø, McCammon, & O'Farrell, 2006). Interest in creativity can actually be traced to Plato's times (Cropley, 2004), and studies on creativity have been conducted across a variety of fields (Craft, 2001). The studies are diverse, but most follow one of two directions. (Kaufman & Beghetto, 2009, p. 1). The first direction is a focus on Big-C, the eminent creativity possessed by a genius, and the second is the little-c, everyday creativity that is expected of everyone.

In case of education, studies prior to 1980 usually focused on the Big-C possessed by exceptional geniuses (Craft, 2006). However, the studies were of limited benefit to educationalists because they considered creativity to be an aptitude possessed only by a few people (NACCCE, 1999). Studies of little-c creativity, however, are increasing (Craft, 2001; Kaufman & Beghetto, 2009); they begin with the assumption that all individuals can be creative, and can exert their creativity in different ways. Such a finding is particularly useful in today's world, which relies on individuals to be creative to enable nations to maintain international competitiveness. The belief that everyone can be creative in their own way places great expectation on school education, which are expected to develop the creative abilities of all the students.

Lucas (2001) defines creativity as a state of mind in which all intelligences work together. It involves seeing, thinking, and innovating. Craft (2001) describes the characteristics of a state of mind as: (1) the active and intentional taking of action in the world, (2) a way of coping with everyday challenges, which may involve knowledge-based intuition as well as step-by-step thought, (3) innovation, (4) a moving on, (5) problem identification as well as problem-solving. Creativity, as a state of mind can be demonstrated in any subject at school and in any aspect of life (Lucas, 2001). This conceptualization shows that all students can develop their creativity in any subject or activity, and directs us to the conditions of school education that enable students to develop creativity.

Many studies have found that densely prescribed curriculum is the biggest obstacle to developing students' creativity through school education. For example, Dobbins (2009) says that the unit-based structure of curricula, along with the allocated blocks of time to cover each topic, is a key restriction to teachers' ability to be flexible and adaptable with what and how they teach. He also claims that excessive content to teach makes it impossible for education to achieve anything except the bare minimum of completing the curriculum. Azzam (2009) and Prentice (2000) also note that it is absurd to expect students to develop their creativity within a highly prescribed and narrow curriculum system. These studies argue that teachers, when freed from simply delivering densely prescribed content and skills, are more likely to be able to focus on students' creative

abilities; that is, creativity is more likely to be fostered when the frame of the national curriculum becomes open and light.

Creativity is not irrelevant to knowledge; knowledge or knowledge traditions is not something that hinders creativity. Boden (2001) points out that it is difficult to be creative without sufficient knowledge. Existing knowledge actively interacts with creative thinking and acts as the criteria to judge the creativity of new ideas. For these reasons, a curriculum for student creativity should be formulated in ways that do not exclude the gaining of knowledge but by developing creativity through knowledge such that students can make associations with existing knowledge in different ways.

The role of teachers is very important in creativity education. According to recent studies, young people's creative abilities are most likely to develop in an environment in which teachers' creative abilities are appropriately engaged (Jeffrey & Craft, 2004; NACCCE, 1999). NACCCE (1999) launched a discussion on teacher creativity by conceptually drawing a line between teaching creatively and teaching for creativity. The former is defined as "using imaginative approaches to make learning more interesting and effective" (p. 89). The latter is defined as forms of teaching that are intended to develop young people's individual creative thinking or behaviour. It used to be the case that teacher creativity tended to be limited to teaching creatively. However, teaching creatively does not automatically guarantee the development of students' creative potential; in fact, it may weaken or interrupt student creativity. Thus, some scholars claim that teacher creativity should be understood as teaching for creativity rather than teaching creatively (Sæbø, McCammon, & O'Farrell, 2006; NACCCE, 1999). Jeffrey and Craft (2004), however, suggest that we should understand teaching creatively and teaching for creativity not as separate concepts but as interrelated ones. The former is inherent in and often leads directly to the latter. Therefore, they claim that we should be wary of the conceptual dichotomization of teaching creatively or teaching for creativity, and both should be dealt with as strategies that teachers can use depending upon the situation.

The overall ethos and conditions of schools are vital for fostering creative education. Creative schools are mostly characterized by a communicative and cooperative atmosphere (Azzam, 2009; Fisher, 2004; Sawyer, 2004). In general, creativity is understood as an individualistic task, but creative achievements are commonly stimulated by other people's ideas and achievements (NACCCE, 1999; Sternberg, 2003). We usually witness great scientific innovations that are generated by cooperation among people who share interests but think in different ways. Even people who stick to their own style of living can be inspired by the cultures they are involved in and the achievements of others. Cooperation, diversity, exchange of ideas, and building upon others' achievements are at the core of creative works. Therefore, for the development of creativity, school ethos should be open and cooperative towards creating, reviewing, sharing, and trying ideas (Fisher, 2004). Furthermore, schools must support rich resources for the development of creativity. This is because exposing students to various and adequate resources to experience and use is a key factor for stimulating the development of student creativity (Dobbins, 2009).

METHODOLOGY

This study aims to critically review the Korean government's policy efforts for increasing the fostering of creativity in schools. For this purpose, we gathered

government documents and related department materials from the mid-1990s when creativity began to be emphasized in Korea's education policies. First, we searched for data using keywords such as "creativity education" or "to raise a creative person". Additionally, in order to understand the policies quoted by those materials more precisely, we downloaded materials from the online-sites of related departments and government-funded research institutes. Through this process, we gathered 30 documents: 20 from the central government including the Ministry of Education and 10 from government-funded research institutes.

The analysis involved repeatedly reading the texts and categorizing contents into various themes. We then identified the relationships among the themes and further divided them into upper categories and sub-categories. In cases of disagreement among researchers, we revisited the raw data and discussed the appropriateness of categories.

4. RESULTS

The results of our investigation revealed three themes: increasing flexibility in the national curriculum, developing teachers' creativity, and supporting creative teaching and learning. Each of these themes were further divided into subthemes.

Increasing flexibility in the national curriculum

Adding creative curriculum into the existing curriculum

The Korean national curriculum has driven changes and reforms of the Korean education system since 1954, when it was first implemented. Accordingly, education policies related to creativity have been guided by the national curriculum. For example, the national curriculums revised after the mid-1990s proclaimed that one of the most important goals of education should be to develop a creative person. However, it was not till 2009 that creativity-related education policies began to become more visible. For example, the 2009 revised curriculum, which is still relevant today, introduced "Creative experiential learning activities". These are units in which teachers and students are free to choose a topic of interest and study it in any way they wish. Elementary and secondary schools are required to allocate three to four units to these activities (Ministry of Education, Science and Technology, 2010a). Creative experiential learning activities are ground-breaking, particularly in Korea, where students are burdened with intensive course work, and where text-driven and instructor-led courses dominate. Unfortunately, creative experiential learning activities are limited to extra-curricular units, and, in themselves, are not enough to change the overall school culture.

Recently, Korean government's efforts to make school education more creative have taken another step. The "Exam-free Semester" program, the new system that was introduced in the second semester of 2013 and applied to all middle schools since 2016, illustrates this step. Usually, Korean students do not have adequate time and energy to think about their own talents and dreams because of the constant pressure of exams. During the exam-free semester, students are exempted from regular mid-term and term-end examination and, instead, the school curriculum is operated flexibly, enabling students to enjoy various activities including career exploration. Additionally, teachers encourage students to participate in learning by offering student-centred activities, such as debates and experiments in the classroom (Ministry of Education, 2013a). The

"Exam-free Semester" program, however, provides only limited opportunities to develop creativity because it is restricted to only one semester, and continues to be overwhelmed by the text-driven teaching and learning in the other semesters.

Making space by reducing learning contents

The excessive learning content prescribed by the national curriculum has been constantly questioned in Korea. Such content hinders teachers and students from engaging in creative teaching and learning because it compels teachers to dedicate themselves to delivering knowledge rather than to teaching creatively. Students, in turn, rarely get a chance to develop their creativity under such circumstances. Policies introduced by the Korean government, such as "Creative experiential learning activities" and "Exam-free Semester", cannot succeed in fostering creativity in schools unless the amount of prescribed content is reduced.

The Korean government, therefore, has attempted to lessen the amount of prescriptive curriculum content. Since the mid-1990s, Korea has revised its national curriculum four times and reducing the learning content of the subjects was one of the main reasons for the frequent revisions (So & Kang, 2014). For instance, the required number of subjects in each semester was reduced in the revised 2009 national curriculum from approximately 13–14 subjects every semester to eight compulsory subjects per semester. This policy was based on an assumption that a reduction in the number of subjects would guarantee more time for more creative teaching and learning. In addition, the Korean government has revised its national curriculum to reduce the learning content to be covered under each subject.

Developing teachers' creativity: Let them take the initiative

Extended support for teachers as researchers

At the same time that the Korean government introduced creativity education, it explicitly recognized the need to enable teachers to implement new educational system (Ministry of Education, 1998; Presidential Commission on Education Reform, 1996). Thus, in the 1990s, when creativity education was first introduced, the Korean government presented a plan to support the further teacher training. In addition, the government announced that it would provide research funds for elementary and secondary teachers to conduct research into how to implement the program in their school. The government expected that such funds would inspire teachers to carry out research and utilize the research results in educational activities (Presidential Commission on Education Reform, 1996). This was a significant step because it recognized teachers as autonomous agents who understand and interpret policies in their own ways rather than as mere policy practitioners.

Teacher research on creativity education has recently gained momentum, with support given to teachers who are studying how to practice creativity education in class. Teacher research groups are usually named after keywords of an education policy; for example: "Research Groups for Creativity-character Class" includes "creativity-character", which is a keyword recently coined and has been emphasized in the Korean education policy since 2009; and "Teacher Research Groups for Exam-free Semester". The topics of the research is generally focused on developing or applying new teaching methods, evaluation models, and education programs. The research outcomes are submitted to

and assessed by host institutions, such as the Ministry of Education or government-funded research institutions. The host institutions select the most creditable results and convert them into online resources or books to be shared with other schools across a region or the nation. The Korean government appears to expect excellent models for creativity education to be developed at the school level that can then be spread throughout the majority of schools (Korean Educational Development Institute, 2015).

This method of developing teacher creativity is an inspiring movement in Korea, where most teacher education has traditionally been led by teacher training institutions and focused on delivering knowledge. Through these changes, teachers can practice creative teaching voluntarily and actively, rather than taking a passive role. However, because teacher research is funded by the government, it is evaluated largely based on tangible outcomes, which could lead to the research becoming superficial or outcome driven (Lee & Choi, 2013). Moreover, since the aims and results of those studies are usually linked to national policies, a legitimate question is whether the agency of teachers is exploited as a tool to realize government policies.

Practical contents and methods of teacher education

Teachers in Korea have either a theory-oriented or a practical knowledge and skill-oriented education. The former method was initially prevalent; it was relatively low cost and efficient, and simultaneously delivered the same knowledge to hundreds of teachers. However, such a focus on the acquisition of concepts and theories led to a widening of the gap between teacher education and the reality of the needs of the schooling of children; arguably, such a method can act as a barrier to school reform.

In an attempt to more closely connect teacher education to classroom and individual school needs, recent in-service teacher education for creativity education does not confine itself to understanding the concept of creativity and creative teaching theories (Ministry of Education, 1998). Teacher education has changed from a focus on theory and academic knowledge to practical methods and teaching skills that can be utilized in classes and to advance the school curriculum. For instance, the main content of teacher education now centres on competencies, such as leadership, creativity, and understanding students, all of which are required in teaching practices (Ministry of Education, Science and Technology, 2012). Certainly, Korean teachers still learn theories about creativity and creative teaching but the larger part of teacher education pertains to practical contents that entail discovering spaces for increasing field trips and applying creative teaching methods to their own classes (Ministry of Education, Science & Technology, 2011; 2012; 2013).

Methods of teacher education are also changing from lecture-centred to learner-centred. As stated by The Ministry of Education: teacher training programs for creativity education "should focus on teachers' practices and include introduction of instruction models for each subjects and teaching methods that can be used in the actual teaching and learning situations" (Ministry of Education, 2014, p. 6). As a result, teachers no longer merely sit at desks and engross themselves in note-taking during the training program. Instead, they analyse or assess the best practices for themselves and even develop their own creative curriculums, evaluation methods, and teaching skills suitable for their schools (Ministry of Education, Science and Technology, 2010b; Ministry of Education, 2013b; 2014). This more practical style of teacher education appears to help teachers to better deal with issues they face in today's classes and usefully aligns with

the creativity education policy. The problem, however, is that teacher education still leans too much towards learning how to use ready-made materials, online systems and developing teaching techniques, all methods that may reduce teachers' competencies and knowledge for creativity education to a mere technical strategy, thus undermining the ultimate goal and value of creativity education.

Supporting creative teaching and learning

Ready-made educational materials: Easy and convenient to use

Ministry of Education, Science and Technology (2010b) notes that "imputing responsibility of educational reform and school improvement to individual teachers without systematic support from the government" (p. 7) has caused teachers to become lethargic and dispirited. Achieving educational reform without the understanding and support of schools and teachers is difficult (Moon et al., 2010). The Korean government, therefore, established various aids at the national level to enable teachers to practice creativity education in their schools and classrooms. One method was to develop and disseminate educational materials for creativity with the aim of reducing the burden on teachers to develop their own materials and an expectation that teachers will apply the given resources flexibly (Moon et al., 2010).

The resources are detailed enough to be used directly in lessons and for implementing the curriculum, having been developed through government-funded research institutes (Choi et al., 2014). The resources include lesson plans on specific topics, activity sheets for students, and teaching materials for experiential programs, as well as procedures, forms, checkpoints, and actions required for operating particular types of school events and programs for creativity. Foreign documents and books related to creativity were translated into Korean and are also provided through online websites run by government-funded research institutes (e.g. www.crezone.net).

These initiatives may help to directly support teaching and learning activities in classes. Nevertheless, the educational materials and resources are ready-made goods developed by outside experts rather than the teachers themselves and require immediate application. As a result, their misuse may even hinder teachers from becoming creative.

Building an online System

The Korean government constructed an online service in the mid-1990s to provide comprehensive education information to students, parents, and teachers (Ministry of Education, 1998). Since then, utilizing Korea's highly advanced information technology, special online systems have been built exclusively for creativity education. One of the best examples is *Education Network for Creativity-character* (www.crezone.net). It provides not only information on available facilities and resources across the nation for creative experiential learning activities but also professional materials for creativity-character education, such as teaching models, exemplary cases of creative curriculum, and outcomes of teacher research studies. It also functions as a channel for introducing events and forums on creativity education. This system is a useful and effective channel for communicating and sharing information.

Another online system for creativity education is the Creative-activity Resource Map (CRM) system. It introduces a list of accessible institutions for creative field work

across the nation and their programs. Each provincial office of education runs its own CRM, and every regional CRM site is interlocked with "Education Network for Creativity-character" in order to provide all information about creative activity resources at a glance.

Through such systems, the Korean government intends to overcome the limitation of institution-led supports system. Online support systems make it easier and quicker for schools, teachers, parents, and students to access the extensive information and services on creativity education. However, it may be that, since the government usually focuses on the development of physical resources, invisible factors such as school culture and ethos might get ignored.

DISCUSSION AND CONCLUSION

The Korean government has steadily endeavoured to realize creativity education through changes to curriculum, teacher education, and infrastructure since the mid-1990s. First, the government increased the flexibility of the national curriculum to make room for creativity education. Programs that allowed more autonomy were added to the existing national curriculum, and the amount of learning content was reduced. The government also provided teachers with opportunities to take initiative in developing their professionalism and to acquire practical knowledge and skills for creative teaching. In this context, the government funds for teacher research were extended, and the contents and methods of teacher education became more closely connected to classroom contexts. Lastly, the Korean government developed ready-made educational materials for creativity education and built online systems to support creative environments in schools.

However, the Korean government's efforts to foster creativity education have limits. First, Korean creativity education policies consider creativity education as separate from school subjects. The addition of special programs and autonomous time for creativity education in the Korean national curriculum stems from this perspective. This tactic gives a false impression that creativity and school subjects can be divided into a discrete category. The development of creativity, however, depends upon subject knowledge (Boden, 2001). That is, creativity can only be cultivated effectively when students acquire a certain amount of knowledge from school subjects. Creativity education, therefore, should be linked to subject knowledge in novel and various ways rather than separated from it. The curriculum for creativity education should encourage students not to simply memorize information but to apply it to a given situation and create new ideas or concepts based on the information.

Secondly, even though the Korean government attempts to nurture teacher creativity, it regards teachers as passive receptors. Providing learning materials in a package for a creative teaching and learning environment, which is similar to the ready-made packages for other subjects, highlights this problem. In other words, Korean teacher education for creativity emphasizes mastering teaching methods and materials that are already developed and which focus on implementing government policies faithfully. Such a strategy inhibits teachers from demonstrating their own creativity. "Ownership" and "control" are the fundamental characteristics of creative teaching and learning (Jeffrey & Craft, 2004; Woods, 1990). Teachers, as with any other learners, would face difficulties developing their creativity without the authority to decide what they are learning. When teachers themselves become creative individuals and are able to use

their creativity in their classes, students' creative ability will also be developed (Jeffrey & Craft, 2004; NACCCE, 1999).

Thus, teacher training and the method of providing education materials, which assume teachers as passive recipients of information should be reconsidered. The competency of teachers to create and creatively utilize education materials needs to be encouraged. Additionally, schools should also be modified to provide teachers with adequate time and resources to practice creativity rather than to merely utilizing disseminated ready-made materials.

Thirdly, because teacher education for creativity in Korea currently focuses on how creatively teachers can teach, the creativity of students is actually neglected. Although "Teaching creatively" and "teaching for creativity" are connected, the former does not necessarily imply the latter (NACCCE, 1999). Teaching creatively might even hinder the development of students' creativity. The Korean government's focus on teaching creatively implies that it is not completely aware of the importance of students' creativity. Teacher education for creativity education, therefore, should not merely focus on how to teach creatively but on the ultimate goal of developing teachers' creativity to enhance students' creativity.

Lastly, the Korean government appears to overlook the value of overall ethos and sociocultural context in Korea when seeking to improve students' creativity. In Korea, a powerful cultural factor that influences schooling is the excessive competition engendered by the university entrance exams, the so-called CSAT (College Scholastic Ability Test). This stems from Koreans' general belief in the correlation between test scores and socioeconomic status (So & Kang, 2014). That is, Koreans assume that admission to a prestigious middle/high school guarantees admission to a prestigious university, which eventually leads to acquiring a good job with high socioeconomic status.

This ethos considerably influences the practice of creative education policies, distorting their original intentions. For instance, even if the government tried to reduce prescribed content and make room for teachers' autonomy, students would still be forced to follow predetermined paths and seek predefined answers because of the existence of standardized tests. This may inhibit students from thinking creatively. Furthermore, the nature of the teacher evaluation system, which in part evaluates teacher performance based on how many of their students enter more highly ranked universities, limits their drive to teach more creatively. Teachers will thus gravitate towards intensively teaching a narrow range of subjects to prepare their students for the tests (Sung & Kang, 2012). Moreover, the excessive competition for CSAT tends to disrupt any communicative and cooperative atmosphere, which is essential to creative school environment (Azzam, 2009). One Korean newspaper reported that many Korean students even do not lend their notes to their classmates in order to achieve higher grades. Korean teachers also have fewer opportunities to work together with their fellow teachers across the boundaries of subjects and classrooms. This may hinder their creativity by limiting their opportunity to share ideas with others.

This study has revealed that, for the last 20 years, the Korean government has actively attempted to make schools practice creativity education by developing a new curriculum, educating teachers, and improving the school environment. However, this type of nation-led efforts does not assure the realization of creativity education at the school level. The Korean government's polices are based on a superficial understanding

of creativity education and the overall conditions of school change. The key point of making creative schools and teachers, who actually implement creativity education policies, lies in helping them to be self-directed and creative agencies of school education and in taking into consideration the educational system and cultural context that affects schooling.

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