

## An Analysis on In-service and Pre-service Teachers' Creative Self-assessment of Creativity

Sook Hee Park<sup>1</sup> and Kyoung Hoon Lew<sup>2</sup>

<sup>1</sup>*Department of Liberal Arts & Education, University of Hyupsung, Korea  
72, Choeruback-Ro, Bongdam-Eup, Hwaseong-Si, 445-745*

<sup>2\*</sup>*Graduate School of Education, SoongSil University, Korea  
511 Sangdo-dong, Dongjak-Gu, Seoul, 156-743,*

<sup>1</sup>*spark@uhs.ac.kr,* <sup>2</sup>*Lewkh@ssu.ac.kr*

### Abstract

*Today the social demand for creative talent cultivation continues to increase. Accordingly, in the classroom, teachers in charge of creative talent education have to do their best to cultivate such creative talent. In the Korean educational field the saying 'The quality of education may not exceed that of a teacher' has been used since long ago. This saying can be applied to the field of creativity education. Creative self-assessment refers to the self-concept of people who believe that they can implement and use creative behaviors successfully in situations where creative activities are performed. Such a belief takes the role of controlling behaviors perceived as part of the creative activities. Teachers' creative self-assessment is very important in that it leads to successful creativity education in the classroom. This study aims at analyzing creative self-assessment values of creativity for in-service teachers and college students who are completing courses that are part of the curricula for becoming a qualified teacher. For empirical research, data collection was undertaken on 36 in-service teachers working at a school located in a metropolitan area of Korea and on 34 pre-service teachers taking curricula for teaching professionals at a college in the same area (n=70). The research tools used was a self-assessment values on creativity. The creative self-assessment values of creativity, respondents were asked to self-evaluate their individual creativity on a scale from 'never creative (1) to 'very creative (9)'. For the research findings, descriptive statistics based on the self-assessment values of the creative efficacy and creativity between in-service and pre-service teacher groups were calculated. In addition, a t-test was conducted to compare whether there was a difference in scores between the two groups. Finally, this study discussed measures to promote teachers' creative self-assessment and suggested implications of the research.*

**Keywords:** *Teachers' creative self-efficacy, Self-assessment values Education of Creativity, Creative talent*

### 1. Introduction

We live in an age where it is increasingly difficult to predict the ways in which society might change in the future. The advent of new technologies like Smart Phones and 3D printers has caused a new industrial revolution, and greatly influenced the way we live and

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socialize. Knowledge is now something that is not just memorized but can be picked out from storage in the cyber world. In such an age, creative problem-solving ability is a highly desired talent, and, it is safe to say that in some ways the future of a nation depends on its capability to cultivate creative talent. Today, creativity is the most important type of human capital.

Much indeed has happened in the field of creativity research since 1950, when Guilford, in his parting address as president of the American Psychological Association, pointed out that the core ability of humanity is not intelligence but a creative ability. Creativity is very complex and multi-dimensional; it is very inappropriate to use a singular measurement tool and it should be measured in multiple aspects.

What cultivates creative talent? According to Csikszentmihalyi [1], creativity manifests itself by the interaction not only of an individual's cognitive and affective characteristics, but also of environmental elements, and the active interplay of three systems, the cultural, social, and individual is indispensable for the expression of creativity.

Today, the social demand for creative talent cultivation is continually increasing. Accordingly, in the classroom, teachers in charge of talent education have to do their best to successfully cultivate creative talent. In the Korean educational field the saying 'The quality of education may not exceed that of a teacher' has been used since long ago. This saying can be applied to the field of creativity education. Therefore, although parents have a great role in the development of individual creativity, it can be inferred that teachers play an even greater role in cultivating creative talent, especially when the reality that students spend most of their time at school is taken into account.

Fostering creativity is one of the more intriguing education related research topics in the world, and interest in this field has also grown rapidly in Korea since the 2000s. However, to date most research in this area has focused on students or learners as opposed to the role of teacher creativity. While pointing out the dearth of interest in teacher creativity, Park [2]'s work in these area found that in-service teachers creative thinking ability scores were significantly lower than those of pre-service teachers and that there were significant difference according to age variables, suggesting the necessity of research on various variables in addition to creative thinking ability.

Individual creative ability may or may not lead to the generation of a creative product. Further, factors like motivation, personality and environment work together for creative output in addition to an individual's creative thinking ability. Motivation is particularly important since it acts as a driving force for human behavior. Choi [3] and Lee [4] asserted that motivation variables such as 'creative self-efficacy' have a direct effect on human creative performance. In this regard, teachers' creative self-assessment is also very important in that it may lead to better creativity education in the classroom.

In educational psychology, self-assessment is the process of looking inside oneself in order to assess aspects that are important to one's personality. It is one of the motives that drive self-evaluation, along with self-verification and self-encouragement. Sedikides [5] suggests that the self-assessment motive will prompt people to seek information to confirm their uncertain self-concept rather than their certain self-concept and at the same time people use self-assessment to enhance their certainty of their own self-knowledge. As creativity research to date has mainly focused on creative personality traits of the creative person, empirical studies on the relation with humor are very much needed.

This study aims at analyzing creative self-assessment values of creativity for in-service teachers and college students who are completing courses that are part of the curricula for becoming a qualified teacher. In this study, the specific research topics are as follows: Is there

a difference between in-service and pre-service teachers' levels of creativity self-assessment values?

## **2. Theoretical background**

In school education, creativity research has focused mainly on learners or students rather than teachers; however there has always been an interest in teacher creativity since the earliest studies on creativity studies. However, Fasko [6] reported that early studies on teacher creativity focused on identifying a correlation between teachers' personality characteristics and learners' creativity development, failing to address other teacher variables which may influence the development of learners' creativity.

The term "teacher creativity" is also a difficult one to define precisely, and the term can mean different things to different people. For example, Marks [7] & Tafuri [8] have adopted an approach centered on individual teachers' creativity. They suggest research findings that creative teachers are more effective for students' creativity development when teaching creativity [2].

Amabile [9], Cropley [10], Csikzentmihaly et al. [11] have adopted an approach in terms of teacher creativity being an environmental facilitator for expression of learners' creativity, and Woods [12], Sung, Kaufman et al. [13] used an approach based on a person who teaches creatively. Through the implicit approach to teacher creativity, Jeong & Park [14] mention that teachers have a tendency to recognize teacher creativity as the 'role of a teacher who helps students in expressing and developing their creativity'. In other words, in regards to teacher creativity, there are both personal approaches focused on teachers' individual creativity and approaches that emphasis the supportive role of teachers' in helping students' express creativity. In this study, teachers' creativity is a concept approached from the former of these views, namely personal, individual creativity.

Motivation variables take an important role in expressing creativity [9]. Creative self-assessment refers to the conviction of people who believe that they can conduct creative behaviors successfully in a situation in which creative activities are performed. Such a belief takes the role of controlling behaviors perceived to be creative activities. As stated above, to date interest in creative self-assessment has been focused mainly on students, although several studies maintain that variables, including the teacher or classroom environment, may influence students' creative self-efficacy. However, since teachers' creative self-assessment influences their creative performance, studies on this particular aspect need to be conducted.

## **3. Research methods**

### **3.1. Participants**

For empirical research, data was collected from 36 in-service teachers working at a school located in a metropolitan area of Korea and 34 pre-service teachers taking courses towards their teaching qualifications at a college at the same area (n=70).

Table 1. Participants

Group	n	%
In-Service Teachers	36	54.43
Pre-Service Teachers	34	48.57
Total	70	100

### 3.2. Research tools

A creative self-assessment evaluation on creativity was used. For the self-assessment values evaluation on creativity, teachers rated their individual creativity on a scale from 'never creative (1) to 'very creative (9)'.

### 3.3. Statistical process

For research findings, descriptive statistics were calculated based on the self-assessment values of creative efficacy and creativity between the in-service and pre-service teacher groups. In addition, a t-test was conducted to compare whether there was a difference in scores between both groups.

## 4. Results

The results from calculating the means and conducting a t-test to identify the differences between in-service and pre-service teachers' creative self-assessment values are shown in Table 3. It can be seen that the mean score of in-service teachers(n=36) was 5.42(SD=1.76) higher than that of pre-service teachers(n=34) as 5.35(SD=1.20), having no statistical significance ( $t=-.18, p>.05$ )

Table 3. Differences of self-assessment of creativity

Group	n	Self-Assessment of Creativity		t	p
		M	SD		
In-Service Teachers	36	5.42	1.76	-.18	.86
Pre-Service Teachers	34	5.35	1.20		

## 5. Conclusion

Teacher creativity is important for developing students' creativity in that creativity is externalized through the interaction with the environment in addition to individual variables. Additionally, individual creative thinking ability by itself may or may not lead to expression of creativity. Resultantly, there is a need for research on teachers' creative self-assessment, as motivational variables like creative self-efficacy take an important role in human creative performance. In such a context, the findings of this research suggest that teacher training system should be improved.

Our research findings identified that creative self-assessment values of in-service teachers working in the real educational field are significantly higher than those of pre-service teachers still undergoing teacher training. Park [2] reported that the creative thinking ability of pre-service teachers is significantly higher than that of in-service teachers.

However, it is encouraging that creative self-assessment, regarded as having a greater effect on the expression of creativity than creative thinking ability, is higher for in-service teachers than pre-service teachers. This study was conducted on a small group which limits the impacts of its findings. However, the study's results suggest the necessity of follow-up studies to identify a determinant of creative self-assessment such as diversity methods for a variety of groups.

The key contribution of this study is that it applied the concept of self-assessment in pre-service and in-service teachers and investigated the difference between two teacher groups. Thus, in order to help improve teachers' creative ability, it is necessary to support their self-concept of their own creative ability in their educational field and school life.

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## Authors



**Sook-Hee, Park**

Feb. 1989: Sookmyung Women's University, Bachelor of Educational Psychology(BA)

Feb. 1991: Sookmyung Women's University, Master of Educational Psychology (MA)

Feb. 1999: Sookmyung Women's University, Doctor of Education (Ph.D)

Mar. 2003 ~ Current: Hyupsung University, Professor

Research Interest: Educational Psychology, Counseling & Guide, Creativity, Gifted Education,



**Kyoung-Hoon, Lew**

Feb. 1992: Sungshin Women's University, Bachelor of Education (BA)

Feb. 1995: Sangmyung University, Master of Education (MA)

Aug. 2007: Sangmyung University, Doctor of Education (Ph.D)

Mar. 2010 ~ Current: Soongsil University, Assistant Professor

Research Interest: Creative Education, Early Childhood Education, Children Development, Education Environment, Motivation