# Creativity-Character Element Analysis by Organic Fusion of Creativity and Character[*]

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*Abstract*

*This research aims to extract Creativity-Character Elements by organic fusions of Creativity and Character by examining previous researches on the relationships between creativity and character. Based on previously related researches on the relationship between creativity and character, there are slight differences in opinions, but it appears that they are influencing mutually. Hence, the coherence of elements of creativity and those of characters was endeavored. There were totals of 36 Creativity-Character Elements extracted through this research results. This study attempted organic fusions of Creativity Elements with Character Elements based on the correlation between Creativity and Character. The results of this research would be crucial and fundamental resources for Creativity-Character Education in the educational fields.*

*Keywords: Creativity, Character, Creativity-Character Element, Relationship between creativity and character*

## 1. Introduction

The most demanded core qualities of a man living in the society of 21st century are creativity and moral characters. In 2009, the Ministry of Education and Science Technology (MEST) proposed Creativity-Character Education as the strategy for national development. And Creativity-Character Education in fields of education was emphasized through Amendment of Education Curriculum 2009. Creativity-Character Education is the core educational strategy conceiving new values and at the same time, nurturing a man of talent in understanding how to live together [1]. Thus, Creativity-Character Education is the central element in training a man of the future society. Insofar, the notion of creativity and character in education were emphasized independently. However, as scholars in the related fields discovered the correlation between Creativity and Character, attempts to combine Creativity and Character were initiated in educational sites. And, Creativity-Character Education became one of educational strategies to raise a creatively competent person [2]. A creatively competent person is a person with righteous characters, moral judgments, and creative thinking abilities. Thus, Creativity-Character Education is a form of futuristic education maintaining crucial notions of Creativity and Character, fusing them organically and fostering both elements simultaneously. As so, the related fields of studies are implementing various researches to fuse creativity and character

organically according to shifts in key elements of education. However, the definition for Creativity-Character is still not so clear, and discussions around this is in progress.

According to prior studies [3-4] on the subject of Creativity-Character Education, teachers practicing Creativity-Character Education in the educational fields are aware of the importance of the Creativity-Character Education. However, they also displayed difficulties in educational practices due to no clear definition of Creativity-Character and lack of understanding Creativity-Character Education. Moreover, the shortage in teaching materials for Creativity-Character Education was also identified as a concern in educational practices. Therefore, in order to Creativity-Character Education to be efficiently practiced, Creativity-Character Elements should be presented with clear ideas and concepts in Creativity-Character Education.

First of all, in order to Creativity-Character Education to be properly practiced in educational sites, the term Creativity-Character has to be solidly defined to help related teachers to comprehend. Also, there needs to be researches on analyzing elements drawn from fusing educational elements of Creativity and Character. The Creativity-Character Elements suggested through these processes would help Creativity-Character Education substantially in the educational sites.

As suggested in prior researches, it is true that there is a variety of opinions on the coherence of creativity and character, but at the same time scholars agree that there are common elements that could integrate creativity and character. But in previous studies [5,2] where Creativity-Character Elements were introduced, only the integration of creativity and character was indicated. And education elements in practices of Creativity-Character Education were divided and advocated independently as Creativity Elements and Character Elements. Ultimately, this directly influenced practices of education fields and resulted in confusion and agitation in Creativity-Character Education. According to these findings, this study will examine the relationship between Creativity and Character and draw upon Creativity-Character Elements by organic fusion of the two. Creativity-Character Education Elements drawn from this study are expected to be critical and fundamental resources in designing related programs and evaluation measures, and practices of Creativity-Character Education in education fields.

The research question of this study is as follows.

Research Question 1. What are the Creativity-Character Elements resulted in the organic fusion of Creativity and Character?

## 2. Relationship between Creativity and Character

Creativity is an ability to make something new and useful [6], it is not a special phenomenon appears in a few geniuses, but a potential ability that everyone possess [7]. Also, the creativity is an ability expressed through the interaction of three systems: individuals, fields and domains. It is a thinking ability of human, which has to be emphasized in individuals and the environment, that is to say, in sociocultural contexts [8]. Also, the creativity is power to bear unique and wonderful though underlining cognitive abilities [9]. As shown above, the notions on the creativity reveal diverse essences depending on positions of scholars. Creativity Elements are also alleged in different ways by each academics.

On the other hand, Character is not an innate personality or a concept of characteristics; but it is learnt human nature that can be changed by deliberate teaching or learning [10]; also it is a concept embracing moral and ethical values, responsibilities, trust, citizenships, *etc.* like in respect, fairness, care and more [11]. Therefore, Character is one of important elements enabling an individual to manifest his or her abilities, and at the same time it is a key element for communal life. In Republic of Korea, Character Education Improvement Act has been implemented on July 21, 2015 to nourish people with sound and righteous characters. Hereby, the foundation for Character Education in fields of education has been

established.

Recently, integrated discussions on mutual effects of Creativity and Character are actively in progress [12]. The integration of Creativity and Character is presented in various perspectives by academics. First of all, most commonly taken by scholars studying creativity, the Creativity centralized perspective is a perspective embracing Character Elements within those of Creativity. Cropley [13] extended Creativity Elements within domains of ethicality; Interpreting the creativity within socio-cultural contexts, Cskiszentmihalyi [8] argued that not only individual cognitive qualities, but also qualities of Character and environmental aspects have to be considered for Creativity Elements.

Secondly, there is a perspective encompassing Creativity Elements within Character Elements. Woo [14] insisted on Character Education through Creativity Education by advocating that creativity, especially flexibility, refines and cultivate our character. Jeon [15] adapted creativity within Character Elements; Peterson and Seligman [16] also accepted Creativity, curiosity, open-mindedness, and ardor for study as Character Elements.

Not leaning on one side, third perspective asserts that Creativity and Character are in mutual and inter-woven relationships. For example, in selection and management of clothing and daily goods, both Creativity and Character are important elements; because the Character Elements considering the others and preserving the nature, and the Creativity Elements thinking divergently and solving problems are requested in them. However, there is a claim that an atomic bomb should not be seen as creative outcome. This suggests that the creativity cannot be judged by individual capacity. In an individualistic view, an atomic bomb is creative outcome, but in the position of the mankind it may lead to a disaster. Along those lines of thoughts, the Creativity and Character are in inter-organic relationships where they can be considered on the same page.

Creativity seeks to find something exceptional by escaping from things already exist. And character respects and endeavors to keep socio-cultural customs. However, the Creativity and Character are not two completely separate matters, but there are many common constructive elements in them, almost allowing them to be seen as two different expressions of the same thing [17]. Hence, Creativity Education and Character Education often understood as incompatible education [18]. The researcher in this study believes that the creativity and character are influencing each other in equal terms and endorses the argument that creativity and the character can co-exist in coherence. However, examining prior researches in this position, Creativity-Character Elements are presented independently from Creativity Elements and Character Elements. In this research, Creativity-Character Elements are drawn from coherence of Creativity Elements and Character Elements.

## 3. Search for Elements by Organic Fusion of Creativity and Character

### 3.1. Organic Fusion of Creativity Element and Character Element

Each academics studying the creativity suggests various Creativity Elements. First of all, Guilford [9] offered divergent thinking (sensibilities on problems, fluency in thoughts, flexibilities in thinking, originality, re-defining, and elaboration) as a Creativity Element. Torrance [7] suggested Creativity Elements in two components of intellectual ability (fluency, flexibility, originality, elaboration, abstraction of titles and resistance on impetuous completion) and affectionate ability (confidence, curiosity, independence in thinking and judging, devotion in work, intuition, not-perceiving things as it is, positive attitude and adventurous spirits). In addition, Korean Educational Development Institute (KEDI) stated that Creativity Elements are bestowed on divergent thinking and convergent thinking. Lee [19] noted cognitive factors, affectionate factors and

environmental factors in Creativity Elements. Respectively, it seems the reason why each scholars offers different factors for Creativity Elements is, because there are divergent perspectives on the essence of creativity. The same holds the truth in Character Elements depending on scholars.

Josephson [20] presented credibility, respect, responsibility, fairness, consideration and citizenship as factors of Character Elements; Cha [21] identified moral dimension (key-value recognition, responsible decision making), social dimension (socio-cognition, affinity) and emotional dimension (self-recognition, self-control) as Character Elements. Furthermore, Korea Institute for Curriculum and Evaluation (KICE) proposed respect, consideration, responsibility, participation, collaboration, empathy, acceptance, conversation and communication skills, problems and conflict-solving-skills and justice as components of Character Elements. There are differences in specific components based on the emphasis of Character Elements.

In order to organically fuse Creativity and Character together, analyses on Creativity Elements and Character Elements has to be conducted first. To achieve this purpose, variously presented Creativity Elements and Character Elements were listed and classified into common domains. Because both the Creativity and Character are consists of qualities required for individuals and qualities required in social relation [22-23,8], this study also separated the two and categorized them as 'elements required in social relations' and 'elements required for individuals.' The Creativity Elements and the Character Elements in domains are as follows in <Table 1>.

**Table 1. Creativity Elements and Character Elements in Domains**

| Type of Element | Context | Creativity Element | Character Element |
|---|---|---|---|
| Elements required in social relations | thinking/perception | • holistic thinking<br>• flexibility | • empathic understanding<br>• positive man<br>• sociality<br>• social problem recognition<br>• flexibility<br>• communication ability |
| | behave/attitude/disposition | • diversity<br>• sensitivity<br>• patience<br>• break the stereotype | • open-mind<br>• community recognition and participation<br>• consideration<br>• leadership<br>• satisfaction relationship<br>• responsibility<br>• cooperation |

| Elements required for individuals | think ing/p ercep tion | • definite purpose<br>• problem finding<br>• problem-solving<br>• fluency<br>• flexibility<br>• metaphorical thinking<br>• imagination<br>• logical thinking<br>• analytic thinking<br>• critical thinking<br>• ingenuity<br>• predictability | • empathy<br>• fairness<br>• pliability<br>• discretion<br>• decision making ability<br>• scholarly ambition |
|---|---|---|---|
| | beha ve/att itude/ dispo sition | • hybrid characteristics<br>• toleration<br> of ambiguity<br>• assignment pertinacity<br>• patience<br>• enthusiasm<br>• curiosity<br>• autonomy<br>• originality<br>• confidence<br>• spontaneity<br>• humor | • positive self-esteem<br>• honesty<br>• humor<br>• patience<br>• self-management<br>• confidence<br>• spontaneity<br>• curiosity<br>• vitality<br>• hope |

As shown in <Table 1>, Creativity Elements and Character Elements can be classified as one domain and they also display the same factors. Peculiarities of these elements can testify relevance of organic fusions of Creativity and Character. Thus, Creativity-Character Elements can be derived from each elements in domains shown in <Table 1>.

### 3.2. Extracting Creativity-Character Elements

Hitherto, the relationship between Creativity and Character were examined through Creativity Elements and Character Elements. The results confirmed that both Creativity and Character were composed of organically fusible elements. Therefore, a Creativity Element and a Character Element classified as in the same domain can be combined and deduced as one Creativity-Character Element. For example, holistic thinking is a Creativity Element that allows unifying concepts of objects in array or opposition and compressing those into a single meaning of thoughts; empathic understanding is a Character Element, in which precisely perceiving and sensibly sympathizing experiences and feelings of the others are encouraged. Concepts of these two factors can be aggregately explained as 'an ability to positively accept thoughts of the others to establish a social situation in a unity.' Thus holistic thinking and empathic understanding can be organically fused into a Creativity-Character Element: 'Ability to Accept Thoughts of the others' [24].

In addition, 'holistic thinking' in Elements Required in Social Relations can be combined with 'empathic Understanding' in Character Elements, resulting in a Creativity-Character Element of 'Accepting Thought of the Others.' Also, 'Definite Purpose' in Creativity Elements can be integrated with 'Scholarly Ambition' in Character Elements,

begetting a Creativity-Character Element of 'Concentrating for Definite Purpose.' The Creativity-Character Elements drawn through these processes of analysis are shown in <Table 2>.

**Table 2. Creativity-Character Element[†]**

| Type of Element | Category | Creativity-Character Element | Creativity Element/ Character Element |
|---|---|---|---|
| Elements Required in Social Relations | Accepting Social Problem | • **Accepting thoughts of the others**<br><br>• **Sympathetic understanding of social problems** | • holistic thinking/empathic understanding<br>• holistic thinking/social problem recognition, empathic understanding |
| | Creative Communication | • **Flexibility**<br>• **Appropriate communication skill** | • flexibility/flexibility<br>• flexibility/sociality, communication ability |
| | Open Social Relations | • **Consideration of diversity**<br>• **Unification of oppositional opinions**<br>• **Community recognition and sensitive response**<br>• **Understanding and sympathizing the others**<br>• **Interests in new and diverse** | • diversity/consideration<br>• diversity/open-mind, leadership<br>• sensitivity/community recognition and participation<br>• sensitivity/satisfaction relationship<br><br>• diversity/open-mind |
| | Responsible Social Relations | • **Persistent responsibility**<br>• **Patience and cooperation for the community**<br><br>• **Leadership accepting diversity** | • patience/responsibility<br>• patience/community recognition and participation, cooperation<br>• break the stereotype/leadership, responsibility |
| Elements Required for Individuals | Valuable Decision Making for Problem Solving | • **Concentrating for definite purpose**<br><br>• **Recognizing various problems**<br>• **Fair problem-** | • definite purpose/scholarly ambition<br>• problem finding/pliability<br>• problem- |

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|---|---|---|---|---|
| | | | **solving**<br><br>• **Creative decision-making** | solving/fairness, discretion<br>• problem-solving/decision making ability |
| | **Re-construction of Valuable Thinking** | **Valuable Divergent Thinking** | • **Reproduction of thoughts**<br>• **Comprehensive thoughts**<br>• **Insights based on inner-relations**<br><br>• **Imagination out of contexts** | • fluency/pliability<br><br>• flexibility/pliability<br><br>• metaphorical thinking/decision making ability<br>• imagination//pliability |
| | | **Valuable Convergent Thinking** | • **Logical thinking based on ethics**<br>• **Analytic thinking based on ethics**<br>• **Critical thinking based on ethics**<br>• **Specified choice**<br><br>• **Prediction out of contexts** | • logical thinking/fairness<br>• analytic thinking/fairness<br>• critical thinking/fairness<br>• ingenuity/discretion, empathy<br>• predict/pliability |
| | **Open Behavior Practice** | | • **Self-control according to contexts**<br><br>• **Thrust** | • hybrid characteristics/ self-management<br>• toleration of ambiguity/ honesty, self-management, curiosity |
| | **Explorative Nature** | | • **Concentration**<br><br>• **Active efforts**<br><br>• **Constant curiosity**<br><br>• **Proactive participation** | • assignment pertinacity/honesty, patience<br>• patience/self-management<br>• curiosity/honesty, curiosity<br>• enthusiasm/vitality, hope |

| | | • **Positive participation** | • autonomy/self-management, spontaneity |
| :---: | :---: | --- | --- |
| **Positive Self-realization** | | • **Creating humor** | • originality, humor/humor |
| | | • **Self-control in regulation** | • autonomy/self-management |
| | | • **Confidence** | • confidence/confidence |
| | | • **spontaneity** | • spontaneity/spontaneity |

## 4. Results and Implications

This research aimed to identify problems of the Creativity-Character Education in educational sites and isolate the Creativity-Character Elements for the Creativity-Character Education. To this end, the relationships between Creativity and Character were inspected through related previous studies. The relationships between the Creativity and Character were suggested in diverse perspectives by various scholars. And they affirmed that there were significant correlation between the two. Perspectives on Creativity and Character can be described into largely three aspects. Firstly, a perspective considering Creativity as greater than Character encompasses Character within Creativity Elements [8,13]. In contrast, the second perspective encloses Creativity within Character Elements [14-16]. Lastly, the third perspective argues for equally balanced relationships between Creativity add Character. This research has been initiated with an acceptance that Creativity and Character are in mutual relations, influencing each other in both ways, and that they can be organically fused together. In consequence, the researcher strived to organically fuse Creativity Elements and Character Elements, and drew Creativity-Character Elements through this process.

The both of Creativity Elements and Character Elements encompass 'Elements Required in Social Relations' and 'Elements Required for Individuals.' Based on these characteristics, The Creativity Elements and Character Elements were classified into a single domain, and this domain was subdivided by factors like 'Thinking/ Cognition' and 'Action/Behavior/Trait.' Finally categorized Creativity Elements and Character Elements were organically fused within domains of equal weights and the totals of 36 elements were identified in the results. Details of Creativity-Character Elements were presented in the <Table 2>.

In this research, the possible organic fusions of Creativity and Character are confirmed by assorting Creativity Elements and Character Elements within a single domain. This is once again an important discovery approving the correlation between the Creativity and Character. Moreover, Creativity-Character Elements can be extracted for effective practices of Creativity Character Education in educational sites. The Creativity-Character Elements drawn from this study are 'Accepting Social', 'Problem', 'Creative Communication', 'Open Social Relations', 'Responsible Social Relations', 'Valuable Decision Making for Problem Solving', 'Reconstruction of Valuable Thinking', 'Open Behavior Practice', 'Explorative Nature', and 'Positive Self-realization.' And these findings can be applied and utilized as resources for further practices in Creativity-Character Education.

The implications of this study are: simultaneous measures to educate the Creativity and Character are inspected, and concrete educational elements for Creativity-Character Education are suggested. Based on the results of this research, efforts to systematize the Creativity-Character Education by developing and applying the Creativity-Character

Education programs, establishing Creativity-Character Assessment Measures, making and distributing teaching materials, and developing programs for teacher-education are demanded in further studies.

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