

**THE RELATIONSHIP BETWEEN THE CREATIVE AND CRITICAL THINKING
SKILLS (ANALYTICAL STUDY IN FINE ARTS PHILOSOPHY)**

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Abstract

This paper deals with the subject of creative thinking and critical thinking, which raises a number of hypotheses about creative thinking factors can be grouped under three include: cognitive abilities, productive capacity and capabilities of the assessment.

It also deals with the relationship between creative thinking and critical thinking skills, where the skills of critical thinking is divided into three categories inductive thinking skills, thinking skills and deductive skills assessment thinking. It also deals with the relationship between creative thinking and intelligence.

When trying to explain the aesthetic values where it meets the artistic creativity and philosophy through phenomena or aesthetic currents in the color of the colors of aesthetic expression is the freedom of creativity, in connection with the cultural-effects of the natural environment and socialization, gender, etc., have been involved in the interpretation of the philosopher, which means the values of freedom, beauty , right, and charity, and sociologist who teaches Anthropology or technical phenomena through social construction, which means that the interpretation of artistic activity through the psychological behavior and his proficiency to respond. Search follows the analytical method in determining the relationship between the skills of creative and critical thinking through Creative thinking and critical thinking study and Creative Thinking factors

Keywords: Artistic Creativity, Creative Thinking, Critical Thinking, Skills, Aesthetic Values.

1. Creative Thinking factors

Studies began at the hands of American psychologist (Guilford), and a group of his students and his aides¹, by asking a number of hypotheses about creative thinking factors apply in particular to certain models of creative personalities is the world model, technological and inventor, was between (Guilford) later in his study², that most of these hypotheses and their results are also applicable to various fields of art, and eight of these hypotheses, which are limited to the creative nature of clear thinking factors, not thinking of the other factors.

Can these hypotheses, presented by the rating (Guilford) at the beginning, under the three categories as follows, in order of their occurrence in the creative process:

First, cognitive abilities: include a sense of the problems workers, and worker re-specifically, those competent capacity to discover new information, or to identify the outdated information, In this area, (Guilford) laid the foundations of two factors: a sense of the problems workers and worker re-selection, and indicates a sense of the problems to a person's ability to see that particular position involves several problems need to be solved, and this is the beginning necessary to invent any invention.

Second, productive capacity: include fluency, originality and flexibility factors, and fall factors that could be drawn in this area under three categories: originality and fluency, flexibility, (Guilford) believes that these three aspects are the main ingredients of creativity, and ordered her confined to it only necessary, but that if she were available adequate amounts which was enough, if (Guilford) drew this view - essentially - of creativity models in science, the another world agreed with him in this opinion based on research conducted by the technical realization, the technical divisions of an American university students. and it came out of him that there are eight factors to re-similar factors (Guilford), marked by substantially the creators of the Arts students who are less creative, and this suggests that the perception in the arts has common features with the perception of science³, and we address each of these important factors, which represents the capabilities of sensation or construction in perception in some detail the process:

1. Originality: The ability to produce new ideas or funny essentially element of creative thinking, and can measure the degree of novelty or wit by the amount of responses is common or uncommon, it can also measure the authenticity based on the responses, which refers to the links or the implications of remote or indirect (remote associations) for the terms of the choice of the results, or Implications (consequences), and can be measured on the basis of originality degree of skill and dexterity.

Although there has been a clear and definite lay the foundations of this factor to a large extent, but the nature of psychological yet to be determined the same degree of clarity, it appears that it is not mental factor entirely,

But (Guilford) thinks it may turn out to be temperamental factor, or the nature of the nature of the motives, it may be, for example, is a general willingness to be a person again, or predisposed to an aversion to repeat what others are doing, or the tendency of people who have ceased to genius creative in a particular direction because they are so individual.

2. Fluency: is the ability to produce a large number of ideas at a specific time, or is the ease or speed, which are invoked repercussions, not the meaning of the importance of fluency of creativity that all creators must work under the time factor or time pressure, and to produce quickly or do not produce at all, but the meaning of this is that the person, who is able to produce a large number of ideas, in a particular unit time have a greater chance, after installing all the other factors, to find valuable ideas. And Studies (Guilford) streak come to draw four factors fluency are: verbal fluency, fluency collapse, versatility and fluency expressive ideas, these factors are transmitted in other non-verbal image in the field of creativity in art.

3. Flexibility⁴: include flexibility adaptive (Adaptive Flexibility), a person's ability to mentally change the destination (Mental), which is seen through which a solution to a specific problem, and in this sense can be considered as party positive contrast mental stiffness, flexibility Automatic spontaneous) (Flexibility is the ability to quickly produce the largest possible number of different types of ideas, which are related to a certain position defined by the test, requires not get a high score on the test, but that the person alters the laboratory course of his thinking, so moving to new destinations quickly and easily and must not confuse here built automatic flexibility factor, the factor of intellectual fluency that we talked about, while the flexibility factor highlights the importance of changing the direction of our thoughts, fluency factor highlights the importance of the large number of these ideas only. It is believed that these three aspects are the main ingredients of creativity, not only in science and invention but in the arts as well.

Third: the capabilities Rating: include assessment worker who became apparent importance, and fork production four factors, was reached to draw four factors to evaluate is the logical evaluation and assessment Cognitive and evaluation resulting from experience and speed evaluation⁵, and so we find in the end that the Guilford research and his students and his aides have I arrived to the achievement of most of the assumptions that started it, and to the development of these hypotheses and enriching, it also led to the emergence of new factors had never anticipated, and the third result task of this research, they have contributed greatly to reconsider the idea, which has been prevalent for installation the mind, or Map brainpower, it has been rating the prevailing mental capabilities includes heuristics and creative thinking and evaluation, as separate categories of capacity unrelated do not overlap, and the new image, which reached Studies (Guilford), do not prevent the existence of these three categories together in each type of thinking⁶.

The assessment, for example, can be found in the existing thinking on inference, as can be found in creative thinking, creative thinking does not include the capabilities of end to this kind of thinking only, it is featuring some of the capabilities of nature cognitive inferential thinking, as we saw in the ability to sense problems, for example, has research led (Guilford) and his students to important results, was to prove most of the previous hypotheses and development, and to the emergence of new factors had never anticipated, and led to a reconsideration of the prevailing idea of the construction of the mind⁷, agreed several other studies in the results, with the view of the (Guilford) as a result of his research he and his collaborators on the mind factors constituent creative capacities, its owners agree with him on that fluency, originality, flexibility and sensitivity to the problems, the factors most important creative thinking components and characterized samples used in these studies diversity and heterogeneity, there is, for example, a study (Le Voneld), which turned out to them that more individuals creative in specimens of that, they are those who are distinguished from the others the flexibility and fluency, originality and a sense of problems⁸.

Also, studies of (Jerry) and (Defoe) and (Korans) proved that more individuals creative in this sample is distinct from the rest of the respondents fluent intellectual originality, explained Studies (Dreevdol) also that more of these students creative characterized fluent verbal and originality, flexibility, (Guilford) used - as well as - in a number of research, it was to reach results similar to the results (Guilford) after using the same approach to the practical analysis of creative abilities.

It should be noted that one of these researchers have come to prove the existence of a new factor, can be added to the creative abilities, which makes it especially in the field of science creator embraces his problem president for many years, without being lost in the other sub-problems he suffered during those years, but that some scientists have used other models of tests, some of which did not depend on words, but on formats such tests (Torrance) and test (Welch) and reached the same findings (Guilford), which is the most important creative thinking of the mental components are originality and fluency and flexibility⁹.

The light of the true creativity of the art displayed on the air of freedom, and the point of the aesthetic view, cannot logical thought absorb fantasies of no reasonable old man and fables, while artistic creativity can absorb and understand the myths and assumptions naive about the universe, or imagine what is happening in the world the other trips in the fictional world of the Arts in different format, and are best known Ma'ari trip and Dante.

So, the oldest history of consciousness was the history of figurative thought (artistic and creative), which involves numerous creative work which has obscured - with time secrets - a very complex accumulations. Because artistic creativity refined type of social work, and the material of construction in the artistic effect is raw - any shape outstanding of consciousness - which is an essential part as well as the content, it does not exist for any of them without the other, and draw from each other the killing of the two, and what was the work of man is the act of conscious came spirit or came awareness, highlighting the same on the surface, increasingly insistently as the social value of the source, then (verb beginning to exist), and it seems the essence of the human act, introducing order and harmony and beauty to the chaos of nature, as cross-Marx for this particular idea, while select the essence of human activity, as work according to the laws of beauty, while this he meant the human capacity for creativity distinctive animal, which cannot be separated from the standard of its own needs in dealing utilitarian pure all things of nature, which means the birth of a new space of sufficient freedom for the launch of the artist's imagination and thinking together, and being human creativity as the ability to expose what is inherent in the natural, standard and harmony of mind and the legality and show¹⁰.

It is through work specifically, and according to the laws of beauty, the unfolding of the human teleology of nature and rationality, (Croce, 1964), here it originated and gave birth to a variety of formulas and ideas of the ideal in the interpretation of the universe, starting with the setup and harmony in the doctrine of Pythagoras, Ikhwan al-Safa and the platonic idea, even harmony eternal when for (Leibnitz) and for what - the self (the idea) in the Hegelian school, the (Aristotle) in the sayings (Figure activist), or actor, which change material negative nature, they deduced the practice of social rights, which obscured behind the universe of freedom, if the argument beautiful lies at the core of human labor which involve the nature of the principle of aesthetic since the early stages of artistic creativity, to create a complex system of branches of art, we've inherited a system of branches of art and the forms that we have from past eras and those who have gone before us through the history of art and creativity, here generate all art issues and contemporary creativity aesthetic as art knowledge and freedom niche technical and aesthetic creativity¹¹.

The impact of freedom seems innovator in the case of natural twinning between creative visual intellectual and creative cultures, through their relationship with the creative artists and intellectuals, and their relationship to the environment and culture on the basis of communication and contact, it deals with how the capacity of human consciousness devise

artistic creativity precisely machined, through the complex nature of his relationship, and what occurred the human consciousness journey to this place of phases, from the beginning of human existence is a living being, and whether the freedom of a positive contribution in identifying human vision of the world and formulation, these questions have formed borders hypotheses based on the explanation and clarification of the role of real creativity and free in art and literature, all of which within a serious attempt to explain some of the implications and terms on the one hand and then put them together to answer about the importance of freedom and an atmosphere of creative free thinking, and reflection on the individual's thinking whether critic explaining or philosopher analyst or an artist producer or recipient gourmet¹².

When it increased human vision complex including encounters on the ground of the social and intellectual changes, and since has made scientific achievements and technology, have had a profound impact in adapting ongoing relationship dialectic between consciousness and reality shifts, and then in the formation of public creativity, and in particular artistic creativity, and in this cognitive philosophy see philosophy, aesthetics, mythology, science cultures, psychology and art history to have an impact in various related study of the human being, freedom and integrity of his character fields of knowledge, so, grew up the complex relationship freedom and creativity and their relationship with the concepts of art and beauty, thought and deed, which affected the relationship between cognitive and creative in achieving greater creative freedom.

2. The relationship between the skills of creative and critical thinking

Critical thinking skills are divided into three categories: inductive reasoning skills to reach any generalizations, rules and laws through small molecules, and deductive skills, logical thinking, a measurement process, which is to reach the results of introductions. Skills Assessment minded and mean make a judgment about the value of some of the things and ideas, and critical thinking criteria include clarity, health, accuracy, connectivity and depth and breadth and logic.

The creative innovative thinking include skills: fluency, flexibility, originality and sensitivity to the problems and keep direction, including the obstacles faced by obstacles personal, environmental, and personal obstacles include: lack of confidence and inclination to keep up the enthusiasm and excessive haste and stereotypical thinking and insensitivity, and

environmental obstacles include: resistance to change and a lack of balance between cooperation and competition and a lack of balance between the grandfather and humor.

The difference between critical and creative thinking, critical is logical and tight, evaluates things exist does not change anything, and creative forked or spaced, violates things exist or logical and cannot predict its outcome¹³.

As attachment to creative thinking and intelligence, Plato gave the words of his teacher Socrates in the dialogue with the Republic of theory about brainpower, this theory assumes that it can humans be divided into three non-categories of change: the rulers and the philosophers in their high-handed brainpower, followed by military commanders, and followed by workers the peasants, while Aristotle linkage between mental and brain functions, and presented a vision of intelligence on the assumption that it consists of three aspects: first my only, and the second practical connection with the skill, and the third production the ability to creativity and innovation.

Ibn al-Jawzi discussed in his book "intelligent" the environment and genetics issues and the relationship between physical composition and intelligence climate in intelligence and the impact, but the two presidents accounted for his interest when his study of intelligent verbal and practical or ability to solve problems, which depend on the perception of the problem and speed response¹⁴.

There is no doubt that the relationship between creative thinking and deep intelligence and to be virtually conjunctivitis, creative thinker and intelligent, but the creativity is characterized also by perseverance and hard work for someone energetic and flexible and highly effective¹⁵, and must be a motivation as a prerequisite to do any mental iconic Activity such as enthusiasm, sensitivity and gravitate to what is a mysterious love of the question, and a desire for excellence and creation, and that any creative work is only the laborious process of creating carried out in order to retain creative to retain personal integration or integration of society¹⁶.

As for the relationship between creativity and intelligence, although (Therman) research and other similar research has confirmed the existence of a relationship between two levels: the intelligence and creativity, but that is not a sufficient and satisfactory condition in order to detect creativity and predictable, creativity and intelligence are not two terms for one thing, but they two separate abilities, and intelligence is a distinct part of the mental activity, creativity and another part of it¹⁷.

If the creative thinking is characterized by high-worth of the individual and society and useful results, it is if limited to the use of intelligence in positive ways serve the same person on the one hand and the others around him, while can be used intelligence in negative ways, therefore, the one who makes a distinction between creative thinking and intelligence that first paired with human values and ideals and ethics, while the second was deflected by sometimes¹⁸, and each person can be smart, Intelligence is skill learnable, a natural right of every individual, and associated intelligence freedom, justice, and insist on, the genius is not an extraordinary man¹⁹.

The main obstacles to creative thinking remains unchanged most important constraint psychological manifested either to live in the shadows and illusions and empty dreams and blind to the realities, and the disabled intellectual tradition that appears to accept the prejudices without scrutinized and examined and swallow it at face value, the environmental constraint of traditional family education and thinking authoritarian, parasite and complacency which leads to sagging intellectual and mental inertia²⁰.

When talking about the personal attributes of the creators themselves and their character and composition of this personal, and what can be different in it for personal other people who did not excel creativity or excel in any areas, what are the features that can distinguish these creative personalities. The characteristic general willingness or general tendency printed the individual behavior of a special character and poses and colors the mind and appoint its kind and quality, but this idea first two aspects of an independent ready for the external environment conditions and the second is the public or the stability and consistency in individual behavior resulting from the features and the two sides are linked closely.

The features can be arranged in the form of a pyramid runway dominated by one major trait or several central attributes, followed by a set of secondary features. Also, each individual has a number of other secondary features Minor raised by a set of specific stimuli narrow produces all raised as well as a set of specific responses narrow equivalent to it, and we can call on the secondary features the name "trends" instead of features so as to variety and relates to specific positions.

Features are divided into: primary attributes too generic or original basic features (Primary or source traits). Minor or superficial traits (Secondary or surface traits), and is considered the primary feature is responsible for all forms of behavior and attitudes in the mental aspects of behavior or personality. The fact that we cannot note the same features but observes behavior that demonstrates the features²¹, so it is no longer brainpower involved in

creative thinking, a fluency, flexibility and originality is the only touchstone good to predict creative performance, but it has become necessary to add to the personal attributes of mood and motivation that creativity shift from mental capabilities or preparations latent within the individual to creative performance already in order to achieve a greater degree of accuracy and honesty, despite the fact that the creative response requires a certain mental abilities, but the mental capacity affected undoubtedly motives and features mood of the individual, and that creativity is a combination of mental properties preparations emotional climate preferred by the creator²², and to reveal the relationship between creative thinking abilities and personality traits must focus on fluency, flexibility and originality in addition to the mental aspects and features of a person's mood and motivation factors. As for the relationship of personality traits fluent there is a positive correlation between the fluency of expressive and all of impulsivity and aesthetic expression, where the creator more aggressive and more likely to express aesthetic (fluency expressive), and be more receptive to the ambiguity (fluent collapse), and be more aggressive and self-confidence and control and more appreciative of authenticity (intellectual fluency)²³.

The relationship with originality, euphoria which is characterized by originality, can be facilitated by features such as the need for freedom and the need to be different from others and the need for adventure and accept ambiguity, featuring creative production on my own terms be more inclined to express aesthetic and thinking contemplative and thinking mind, and more receptive to ambiguity.

The relationship with the flexibility, there are two factors for flexibility in thinking: the flexibility of adaptive automatic and flexibility, the two kissing recipe perseverance and inertia, maintaining of thinking, Perseverance means to stick to one way to build a position or stick and stick in a certain direction, and the pollutants they need for change and liberation and impulsivity. The relationship with the intelligence, the most intelligent person is less likely to indulge in self-reflection, and to obey the demands of cultural and less need for obedience and for the system, arranging and less active in terms of physical and more the need for ambiguity and Les greater need to express aesthetic.

There are other clues to some objective means indicate that the creators are more spontaneous than the others, and more than sufficient by themselves, and more independent in judgment, they are opposed to the opinion of the group if they feel they are right, as they are more receptive to the contradictions in their minds and firmer control over themselves and confirmation and receptive to her and inclined to install, they are also more daring and

adventurous and liberal and bohemian, but at the same time, more restraint for themselves and control it, and perhaps they were more in the emotional sensitivity and convergence to a certain extent²⁴.

We can through what is already a personal description creator and characteristics as: human welfare easy collaborator adjustment can rely on him and trust him express himself easily, is a social person characterized by diastolic, depends on himself and his own views by riding out for others, and show self-sufficiency in the behavior characteristic clearly that is, a person can be characterized by introverts, which is characterized by impulsively and speed its ability to provoke and not adjusted for expressions of emotional and not to succumb to cultural demands as they are at the same time is characterized by force of will and respect social and ambitious demands and ability to control emotions²⁵.

Therefore, the creative person who combines contradictions, which lies in the negative relationship between expressive and characteristic fluency that measure emotional configuration force toward the self, as opposed to the positive relationship between originality and strength of emotional configuration towards the self, well, this is the attribute that gives contradictory relationship with the employees of the factors creativity two fluency and originality equal in content to the notion of cessation in return for the rush to respond, and highlights from the study of the relationship between personality traits and abilities of creative thinking, the overall fluency factors require a rush, while the originality factor requires no rush as far as requiring reversal of much of palm, it is therefore assumed that the originality linked to negative In the rush²⁶.

The artistic creativity is limited to the owners of the artistic talents somewhat, and not only that but the artistic talent themselves on the variation in the degree of creativity, and depending on the stock of knowledge and demo the artist, but that artistic creativity is different from any other business in that the artist is not able to innovate at any time²⁷, although the talent, a potent force in psychology, is the basis of artistic creation, and verification of creativity without talent, but must each talent refine and awareness and the development of, and be to enrich the experience and increase knowledge and directed²⁸.

Al-Tawheedysaied that the unifying nature above the industry (Art), and that the nature of how the industry without accept here that makes nature (talent) subject to the industry, in other words: The refinement of talent is one of nature but is the industry. This means need or subordination of nature to industry, and this contrasts with the view of the creativity²⁹, and this confirms the unity of the unifying theory of art and integration, and that the views and

attitudes that supplied constitute a summary of his opinion and his position, and therefore is not just the views of casual, nature in need of the industry, when you reach the perfection of the mediated industry-speaking self-hand incident that would clarify what not, to complement what to take and complete to give, and due to inter conditions and data to be achieved by starting with the talent and inspiration down to prepare the psychological situation experienced by the creator, and the conditions appropriate for this creativity³⁰.

As for the standard that allows us to stand on the creative ability and the extent of structural cohesion in the artistic impact, sobriety, it's where the theoretical division becomes the inspiration based source, as well as mental vision, The creativity in reconciling the inspiration and mental vision³¹.

A comparison between intuition is the basis of inspiration, mental and vision³², the spirituality of the ability of the human image, and the vision of a human image in a in a spiritual dress³³, is interested in psychoanalytic study of the psychological motivations of any factors that drive geniuses to get their work done, have him (Freud) that the artist is due to the realism by using his talents transform imagination into reality, and distinguishes (Thomas Young) between the two types of artistic creativity, two creativity psychological and creativity Scout, and whatever the diversity of the art form, the contents are always derived from the field of conscious human experience did not Young primarily concerned with this type of creative activity and the psychology of artists that create this type of work, even though they make up the majority³⁴.

The artists who cares for them (Young) are those who belong by their imaginations the kind which he calls visions scout owners and this kind of visions Scout cannot be derived from the personal life of the artist when it is more likely that Freud interpreted this article as arising from early childhood, It was assumed (Young) and the presence of the level of the mind called the collective unconscious, which he considered the source of the production of images or prototypes which manifested itself in different forms in different cultures.

The artist Scout in the opinion (Young) did not invent this article as far as controls are, and the perception of (Young) that the individual mind to function in the same way, and saw (Young) that artists of the genre Scout are the vanguard of their times, which explains the behavior of some of the artists who sacrifice in the truth all around them for the sake of creative attempts.

In the area of innovation, we find Unlike worthy navigation between (Freud) and (Young) in outlook to the imagination, the former tends to the imagination be considered a

form immature mental performance, but (Young) has taken a major as a method in the analysis, and the fact that his description of the process of exclusivity parallel manner a rigorous process of creativity in the arts, through the case of immersion in a dream, which is precisely the situation the mental itself, where most of the new ideas for creative people show up, without access to the degree of exclusivity, which does not reach any artist to perfection and make the most of development class degree³⁵. We can trace the origin of the term, which we pass him for that man has or does not have a genius, in the sense that he possesses an innate source of inspiration beyond the scope of normal intelligence, and share the exclusivity process when (Young) with the creative process in:

1. Both keen on the contact force is personal lurking in the subconscious, both named this force or unconscious genius.

2. Both processes involved in the integration and self-discovery.

3. Both processes include trip has resulted in many benefits but it is not complete.

Throughout the ages, the two schools of thought opposing the genius of nature, one depicting the genius in the form of equilibrium is normal and other avers that there is a close relationship between genius and lack of mental equilibrium, and the great achievements rely on three talents is the ability and enthusiasm and the ability to endure hardship³⁶.

The freedom of creativity of the artist is a continuation of the creativity of nature, This reflects the essence of the art of the modern era, which becomes a form of social consciousness enjoy freedom and relative independence, and here is the High argument is the argument aesthetic characteristic of the modern era, not saying nice which is a feature of the old stage³⁷, and is linked to the difference in that the extent of verification of freedom, as far as is creator is the original work as far as creative work, expressing the origin, if we touch over the originality of artistic creativity when creators through the creative achievements and the extent of their freedom to think and performance, what is it who meets with him or is different when all of the artist's creative traditional and literal.

There is no doubt that the works of art and crafts is the object-oriented property, thing corresponded in every work of art, and the object-oriented feature is the literal production manual, but it is not a term that stands him artwork creative this property is, as the creativity goes beyond object-oriented, because the creative artist does not only mean the external shape, but trying to see things through the data sense and purity of aesthetic vision distinct from the work itself, and in a free, creative work is as an impact to the process of creative innovative, characterized renewal, excellence and freedom pull us to contemplate and proud

of it³⁸, despite the strange element and striving to fit design with functional purpose and aesthetically, the mediator to approach the creative work of the same hand stylistic technique, it is noted that it is like working craftsman style manual, about creativity - any style of work - meet the creator and craftsman.

If we look at the evolution of art, for example, we recognize that the starting point of starting human talent or creative ability on the composition and configuration and provide a greater degree of freedom of the artist, as is this man the creator of the outside world topics or creative imagination, what watching the creator of things and fantasies excite artistic energies amid a state of psychological stress, which drives the entity and honorable, and converts it to the movements and operations of a creative response to these visions, fantasies and emotions without much of a climate of freedom, then, that in those emotional situation (creative process) that generate creative experience felt by the creator, that work artistic creativity for which is the urgent desire first, and is not able to resist the creative front, would meet the themes of Foreign aesthetic vision, causing a state of creativity is free again, and this is a fundamental difference between the creative artist and craftsman manufacturer³⁹.

Since the eras of Greek philosophy, he was the mainstream, that art is merely a simulation of a different nature and areas phenomena, albeit with differing views to judge the aesthetic this simulation between the past in that it copies distorted nature, uncertain possibility emulated nature Aesthetically⁴⁰, Art is nothing but a simulation of nature⁴¹, but like this, was a beautiful art form when (Kant) is a natural beautiful is not beautiful, which is made by the art⁴², while (Benedetto Croce)⁴³, went to the artist is the one who utters nature⁴⁴, and that art transcend nature can as human industry derived from nature, which is divine and no way for manpower to gain divine power of equality⁴⁵.

Conclusion and search results

- Critical thinking skills are divided into three categories: inductive reasoning skills to reach any generalizations, rules and laws through small molecules, and deductive skills, logical thinking, a measurement process, which is to reach the results of introductions.
- Skills Assessment minded and means make a judgment about the value of some of the things and ideas, and critical thinking criteria include clarity, health, accuracy, connectivity and depth and breadth and logic. This is the basis of the research methodology.

- The creative innovative thinking include skills: fluency, flexibility, originality and sensitivity to the problems and keep direction, including the obstacles faced by obstacles personal, environmental, and personal obstacles include: lack of confidence and inclination to keep up the enthusiasm and excessive haste and stereotypical thinking and insensitivity.
- The difference between critical thinking and creative thinking, critically and logically tight resides things exist does not change anything, and creative thinking forked or spaced violates things exist or logical and cannot predict its outcome.

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