

Empowerment of the Right Brain Hemisphere in Developing Students' High Concept and Touch

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Abstract—supposed to build creative, empathic, and happy, meaningful thinking because of non linear, intuitive and holistic nature. Nowadays, right brain hemisphere is basic concept to build up students' high concept and touch. High concept is to develop an artistic ability, emotional intelligence, satisfied story, brilliant idea. High touch is to build up sympathetic ability, harmonic and warm relationship, care for fellow human beings, beautiful inner peace, as well as meaningful life. So that, it is needed learning design with paying attention to element of the story, empathy, game, and meaning to bring about students' high concept and touch.

Keywords—component; Right Brain Hemisphere, High Concept, and High Touch

I. INTRODUCTION

The human brain is functioning as to receive, organize, and distribute information to guide our actions and store important information to be used in the future [1]. [2] explains that the two hemispheres of the brain do not work like a switch (on-off)—one moves down as soon as the other is turned on. Both hemispheres (right and left) play a role in every activity we do. We say that certain brain regions are more active than others, when they perform certain functions, but we cannot say that these functions are limited to certain areas. However, these two hemispheres of the brain take a very different approach in guiding our actions in understanding the environment and reacting to events.

The right brain hemisphere is not inferior to the left brain, but its function runs activities is different as human being and it can be complementary in producing brilliant works in certain scope. [1] describe separately in the right and left brain hemisphere sequentially, namely the left brain hemisphere thinks, superior in analysis and careful processing on numbers and words; while the right brain hemisphere thinks holistically, recognizes patterns, and interprets non-verbal emotions and expressions. Comprehensively [2] carefully summarizes the function of the two hemispheres, namely: (1) the left hemisphere of the brain controls the right part of the body and the right hemisphere controls the left side of the body, (2) the left hemisphere is sequential and right hemisphere is simultaneous, (3) the left hemisphere specializes in text and right hemisphere in context, and (4) the left hemisphere analyzes the details and the right hemisphere synthesizes the whole perspective about something.

The right brain hemisphere is the focus of the study of this paper and needs to be empowered to develop high concept and high touch in students' thought. High concept encompasses the capacity to detect patterns and opportunities, create beauty artistic and emotion, compose satisfied narratives, and incorporate seemingly unrelated ideas into something new. Whereas high touch is intended as a kind of ability to be empathic towards others, comprehend the intricacies of human interaction, find a person pleasure and put it in others, and pass all day in search of goals and meanings [2]. Each teacher should interpret every learning material that she carries out in the high concept and high touch context that can bring creative products, artistic skills and students' plenary abilities.

II. RIGHT BRAIN HEMISPHERE AND ITS ATTRIBUTES

The right brain hemisphere has reached a legitimacy standard [3] Furthermore [5] states that it is real, It is important and it helps us as human beings and no neuroscientists argue. The right brain hemisphere is a storehouse for all good, fair and respectable human's behavior [4]. The right brain hemisphere is the key to expand human's thought, revive trauma and heal autism. It will save us. It is the key to creativity and even great ideas [4].

During this time, people comprehend that is the right brain hemisphere contains emotional content, answer by intuition, and comprehend things holistically - it is interesting, but it is an additional one and the most important is true intelligence. [1] says that modern society still acts discriminatory against the right hemisphere, which always glorifies the ability to use numbers and analytics in making decisions and actions, which actually will be even more powerful if supported by the ability to think holistically, using certain patterns and emotional intelligence as a driver to do things.

The human brain (left and right hemisphere) is contra lateral that is each brain hemisphere controls the other side of the adjacent body. Therefore, [2] exemplifies that a person who has a stroke on the left side of his brain will make it difficult for the person to move the left side of the body and the stroke on the left side will damage the proper right function, and vice versa. Furthermore [2] said about 90 percent of the population used the right hand which meant that is about 90 residents — the left hemisphere controls important movements such as writing, eating, and moving other things. Contra lateralization acts — not only when someone writes a name or kicks a ball, but also when moving his head and eyes.

Here is another example — look at the left slowly; once again, the adjacent hemisphere, the right side of your brain will guide the movement. Look at the right; this time, the left hemisphere hold the steering wheel. Now, using any part of the brain you like, think of an activity that includes the first movement, which moves slowly your head and eyes from left to right, such as the Latin system — reading and writing involves switching from left to right.

Another dimension of the alphabetical mind, such like sounds and symbols processing in sequence. When you read the sentence, start with the word "when", move to the word "you", and find the meaning of each letter, every syllable, and every word that is in progress [2]. This is also ability - where the left hemisphere of the brain will be superior. [5] emphasizes that the left hemisphere is good particularly at recognizing serial events whose elements occur sequentially and controls the sequences behavior. Serial functions performed by the left hemisphere include verbal activities, such as speaking, understanding other people's words, reading and writing. Conversely, the right brain hemisphere does not move in the formation of a single file like A-B-C-D-E, but a kind of ability to interpret something simultaneously [2].

The right brain hemisphere is specializing in seeing things at once - seeing all parts of a geometric shape and comprehend it, or looking at all elements of a situation and understanding what it means [5]. This makes the right brain hemisphere especially useful in interpreting faces and giving humans a relatively more position than computers. For example, Acer that many people use to type sentences and millions of calculations per second, it is farther than the fastest humans' left hemisphere. However, even more powerful computers in the world cannot approach the human's speed and accuracy in recognizing faces [2]. Therefore, the left hemisphere is sequential to count thousands of words, while the right hemisphere is simultaneous to interpret an image.

On the other hand, [2] says that language starts in the left hemisphere for most people (this can apply to 95 right-handed users and 70 left-handed users, the rest — about 8 percent of the population — the division of language's work more complicated). However, the right hemisphere does not give full responsibility to the left hemisphere, and instead of those two sides perform complementary functions. For more details, it can be said that the left hemisphere is concerned with "what" is said, while the right hemisphere focuses on "how" he says — non-verbal cues that are often emotionally conveyed through sight, facial expressions, and intonation. However, the differences between the right brain and the left brain includes more than just verbal and non-verbal and text and context [4], even more broadly, for example — in certain written languages depending on context. Arabic is often written in consonant form, which means the reader must understand what the vowels are with the concepts and ideas that surround them, which are written from right to left.

Besides, [5] generally says the left brain hemisphere participates in analyzing information, while the right hemisphere is devoted to fusion — it is good at gathering separate elements to understand something in its entirety. Analysis and integration are two ways of interpreting the most

fundamental information. We can separate one entity the whole into its parts or assembling small parts into a whole — both are very important and useful for human reasoning, but that are guided by different parts of the brain. [6] revealed that data indicate that a calm right brain hemisphere is devoted to understanding the structure and patterns of various phenomena — especially those that become a combination in the face of information input, whereas the left hemisphere will appear to run on a more logical and analytical computer model. The language is not sufficient to perform a fast complex synthesis by the right hemisphere. Therefore, the left hemisphere meets one single answer, focuses on the categories, and understands the details, while the right hemisphere refers to the whole, relationships, and can see the whole perspective on something

III. BUILDING HIGH CONCEPT AND TOUCH WITH SIX INTELLIGENCES

In the introduction, high concept is the ability to create emotional and artistically beauty, detect patterns and opportunities of satisfied story and combine seemingly unrelated ideas into a new discovery. While high touch includes the ability to give sympathy, understand the ins and out of human's interaction, get pleasure in a person and give it to others, and pass daily life in search of goals and meanings. High concept and touch are highly developed in society and the world of education, such as in various medical faculties that are currently being trained in "narrative medicine" — because the research reveals that despite the role of the power of computer diagnostic methods, but an important part of a diagnosis also includes patient stories, superior paintings look at the details of the patient's condition, and include elements of spirituality in colleges with the aim to instill a sense of empathy among students ([2]. Similarly in Japan according to [3] partly people have begun to suspect that the nation's focus is so firm on school textbooks that it might be an outdated approach. Therefore, the country is redesigning the praised education system to foster greater creativity, artistic skills and play. For this reason, the Ministry of Education of Japan encourages students to reflect on the meaning and mission of their lives and encourage what is called "heart education". Here, it seems increasingly clear — something is happening — and what is becoming increasingly is clear that high concept and touch are moving from the periphery to the center of our lives.

According to [2] in the United States, a number of graphic designers have increased ten times in a decade — graphic designers outnumber four chemists to one. Since 1970, the United States has 30 percent people who make a living as writers and 50 percent who earn a living by composing or playing music. A total of 240 universities in the United States hold MFA programs (Master of Fine Arts), such as creative writing increased by fewer twenty than two decades ago. Now, many Americans work in art, entertainment, and design rather than working as lawyers, accountants and auditors [2]. One sign of the new era also appears in the form of high concept, as done by animators in legal institutions, namely graphic design companies by law graduates who provide documents,

videos, visual assistance to help reliable court lawyers to convince judges [2].

The same tendency towards high touch work is also in the process of development in education and the business world. Using a more rational "creative" definition — covering fifteen industries from design to art, research and development, to video games — British analysis John Hawkins estimates that the creative sector produces \$ 200 billion of the value of goods and services each year. Hawkins calculated that in the next fifteen years, this sector would be valued at \$ 6.1 trillion internationally - making high concept products one of the largest economies in the world [7]. However, creative art in its traditional meaning is not only or most important component of the emerging intellect-minded intelligence. These creations must be explained by educated people and included in the world of education - all of which require talents among students that cannot be reduced, such as intelligence, personal relationships, and deep instincts by a series of rules found in educational institutions. This also applies to high touch abilities, namely the capacity to be sympathetic, caring, and refined - which is an important component of some work in the conceptual era. The amount of work in loving advice, guidance and counseling is growing rapidly — which also needs to be appreciated by educational institutions.

Although high concept and touch are going well, the most important changes of the "conceptual era" must be in our hearts and souls. The searches that are mobilized to get meaning and transcendence can be done in the form of Tafakkur, Zikrillah — closer to God and carry out worship in a consistent and sustainable manner without feeling forced - just to get his blessings and increase Amaliah worship [8]. There is a tendency, when humans are approaching old — they put a greater emphasis on their own lives on qualities that they may forget in their business in fostering careers and elevating family values and dignity in the form of achieving life goals, intrinsic motivation and meaning [2].

Entering the conceptual era, L-Directed Thinking is still important, but it is no longer sufficient - we must be clever in R-Directed Thinking and master the intelligences of high and touch concept. For this reason, [2] said we need to complete reasoning directed by the right brain to develop high concept and touch by mastering the six intelligences, namely design, story, symphony, empathy, play, and meaning. For students, this six intelligences is useful as a basis for interpreting every thought product produced and especially in every action and behavior that is displayed, it always contains meaning for itself and the surrounding community.

Clearly, [2] explains one by one of the six intelligences: First, not only function but also design — it is no longer sufficient to create a product, service, experience or lifestyle that is merely functional character, but Nowadays it is also important and personally valuable to create something beautiful, fantastic, and emotionally attractive. Paola quoted [2] said that a beautiful design is a resurgence of attitude that combines technology, knowledge awareness, human needs, and beauty to produce unknown thing to the world that it is lost. Design is also a manifestation of human's character to

shape and make our environment in not existed ways in nature, to serve our needs and give meaning to our lives. We also build an awareness of the children (students) about what design is and how it can influence their lives. The design curriculum is as something that provides a modern version of art education for these children. We must understand that whatever path he will take — their experiences at school will increase their ability to solve problems, understand others, and respect the world around them.

Second, not only arguments but also stories — when our lives are full of information and data, gathering effective arguments are not sufficient. Someone will also find something different to refute your point. The essence of persuasion, communication and self-understanding has also become an ability to create an interesting story. [9] summarizes sharply the essence of high concept and touch from right ability stories to control the elements left by formal decision methods. Our logic thinking tries to generalize, empty decision making from its specific context, pull it out of its subjective emotions. Stories control context and emotions — stories are important cognitive events, because they summarize, in a solid package, information, knowledge, context, and emotion. Stories are easier to remember — because in various ways, stories are how we remember. The story that makes imagination, the story is the most basic instrument of thought. Ratio capacity depends on it. It is the main media to look at the future, predict, plan, and explain — and most of our experiences, knowledge and thoughts are arranged as stories [10].

Third, not only focus but also symphony. Many of the industrial era and information require focus and specialization. Today, what is the biggest demand is not analysis but synthesis — seeing the whole perspective, crossing boundaries, and being able to combine separate parts into an impressive new unit. [2] defines symphony as the ability to combine fractions. It is the ability to merge rather than analyze — to see relationships between seemingly unrelated fields; detect general patterns rather than deliver specific answers; and find something new by combining elements that no one thinks to fix it. Symphony is also an attribute of the right hemisphere in the lateral meaning and metaphors. In addition, [2] says that the right hemisphere operates in a simultaneous, contextual, and harmonious way. One of the best ways to understand and develop symphony intelligence is to learn about how to draw — a skill for seeing relationships and then integrating them into a single entity.

Fourth, not only logic but also empathy. The capacity for logical thinking is one thing that makes us to be human being. However, in an environment full of diffuse information and advanced analytical tools, logic alone cannot be. What will distinguish them who develop quickly may be their ability to understand what makes individuals move, to strengthen relationships, and care for others [2]. Empathy is the ability to imagine yourself in someone else's position and understand what the person feels. It is an ability to experience from another's point of view — seeing with his eyes and feeling his heart. It is something that we do very spontaneously — something instinctive rather than the result of deliberate action. However, empathy is not sympathy, namely feeling

regret for others. It is a feeling that feels what it feels like to be that person.

Empathy is a brave imaginative action, the highest virtual reality — come into the others' minds to experience the environment from that person's perspective. Empathy allows us to see the other side of an argument, pleasing someone who is in trouble, and biting his lips rather than saying something insulting. Empathy builds self-awareness, binds parents to their children, allows us to work together, and provides a supporting framework for our morality [2]. However, empathy - like some of the high concept and touch intelligence - is not always given to right in the conceptual era. It is often regarded as a good kindness in an environment that demands an attitude of rejection, which is ultimately considered an emotional and personal attitude.

Fifth, not only seriousness but also play. Sufficient evidence shows great health and professional benefits from laughter, calm, play, and humor. Absolutely there are times to be serious. However, being so much seriousness may be bad for your career and well. Work and life in the conceptual era — all we need to play [2]. The game emerges from the shadow of seriousness and takes a place as the center of attention. Homo ludens (humans who play) prove to be as effective as homo sapiens (humans who know) in completing work [2]. The game is increasingly becoming an important part of work, business, and personal well — its meaning manifests in three ways, namely play, humor and pleasure. Games, especially computer games and video games become a large and influential industry that teaches lessons by using the intact brain to its customers and recruit a new generation of intact brain workers. Humor shows itself as an accurate sign of managerial effectiveness, emotional intelligence, and thinking styles that are typical of the right hemisphere. Whereas, pleasure, it is as exemplified by sincere laughter, demonstrates its strength to make us more productive and satisfied. [2] says that in the conceptual era, as we see it, pleasure and play are not only fun and games — and laughter is not only a matter of laughter, but contains the deepest meaning of satisfaction from humans.

Sixth, not only accumulation but also meaning. We live in a world that contains an abundance of interesting material. It has freed people from the daily struggle and freed us to pursue more meaningful pleasures, namely achieving goals, transcendence, and spiritual fulfillment [2]. Frankl quoted [2] argues that the main concern of humans is not the acquisition of pleasure or avoiding pain, but rather to see a meaning in his life. The most motivational basic drive that strengthens human existence is the search for meaning.

Furthermore, [2] explained that meaning is possible in the spirit of suffering — in fact, the meaning sometimes arise from suffering. However, it also stressed that suffering is not a prerequisite for finding meaning. The search for meaning is the impulse that is in all of us and a combination of external and internal circumstances will push it to the surface. Similarly Frankl in [2] says that people have adequacy to live, but there is nothing to fight for life - they have tools but not meaning. [11] explains conclusively that the transition from material desires to the meaning desires is moving forward on a

scale that has never happened before in history - which includes hundreds of millions of people and may eventually be recognized as a principle cultural development in our time. Meaning is a central aspect of our work and life. The search for meaning is clearly not an easy job. However, there are ways to practice that are oriented to the whole brain for individuals, families and education to begin a search for meaning — start by taking spirituality and happiness seriously

IV. CONCLUSION

The right brain plays an important role in building student creativity — as one of the highest thinking abilities in human's cognitive. Learning can be designed systematically and comprehensively to develop the right brain that functions to receive, organize, distribute, guide, and store information obtained in learning, reading in the library, and the environment. Thinking holistically, recognizing patterns, interpreting emotions, and building non-verbal expressions can be developed from students if learning is designed simultaneously, context-based, and systemic and opens wide opportunities to discuss and debate in order to get the essential meaning of learning materials.

Efforts to develop the right brain in the conceptual era will be able to produce high concept and touch among students. The high concept desired by students is the ability to create artistic beauty, have positive emotional and spiritual intelligence, and compose a satisfying story and build brilliant ideas, while high touch is building sympathetic skills, warm relationships, respect and caring for others human beings, get the meaning of a beautiful inner calm in themselves and transmit to others and enjoy a meaningful life. The elements that are considered to develop high concept and touch are by developing design skills, stories, symphonies, empathy, games, and meaning in each learning.

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