THE APPLICATION OF PROJECT BASE CONSTRUCTIVE PLAY TO ENCOURAGE STUDENT'S ABILITY IN CREATIVE EXPRESSION AND COMMUNICATION

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ABSTRACT

This research is conducted based on several findings in TK Sejahtera, Bandung regarding to its teaching practice and the nature of the children progress. The application of quasi experiment on the project base play program is aimed to redirect children desire to play and aggressive energy into schemed creative activity. Children mostly show their preference as adaptive problem solver in their creative style and always try to negotiate their idea in communication process. The outcome of the research shows some progress in children creative and communication abilities in the test of variance. The experiment shows large effect in creative expression medium significance in communication ability. It can be conclude that the research have successful in endorsing children creative and communication ability along with their various characteristics.

Keyword; Project Base Play, Creative Expression, Communication

A. INTRODUCTION

Naturally, children are always wanted to play. Playing is actually an important part in their daily activity where they were engage within an ease, simple, and fun activity. However in some occasion, their activity within play does not make a good impact to their progress when it was gone unmanaged. Sometimes it is creating certain habit where they yearning more and more actively engage within the games and fail to meet the expected progress. As Formberg view of play as an expression of children internal mental structure that come engaged through some physical activities, (Dockett & Fleer, 1999: p. 18) Teacher need to sustain their educational strategies in such way to meet the nature of children expression. Some possible aggressive and any other unproductive behavior supposedly caused by an inappropriate conduct to their nature. The pedagogical vision of learning by playing, learning by doing, and learning by stimulating as mentioned by Sujiono (2009: p.9) is truly something to be considered as the base of application in the early childhood education. These principles actually found its relevance in facilitating children energy to learn in wide ranged and enduring program in a well liked form according to their preferences. Project base play is offering some sort of directed activity to accomplish certain goal by making a constructive project. "*The children are actively involved in no just making decisions, creating and organizing adjunct but also playing with the concept, ideas and materials created*" (Dockett & Fleer, 1999: p. 248). Based on what is

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described above, this research is not only aimed to test the application of Treffingger model within the framework of the project base play on solving the problem in children creative and communication abilities but also to explore their creative style during the process and how significant it was to the overall progress.

Just like all the games people play, it is goes without saying that sometimes children cannot differs the creation and the play. These circumstances could somehow broaden the opportunities for teachers to set the variation of their teaching method in order to enhance the progress of the children. Somehow it is strongly correlates with the role of art in education where it could have major impact with its role of application. According to Herawati (1999: p.14-22), it is strongly utilize to the progress as medium of expression, communication, play, talent development, sustaining children thinking skill, and earning the aesthetic experiences. It is also facilitating the creation process within the play that encourages their creative development through various medium of expression.

Naming creativity will leads to divergent thinking concept that based on Guilford intellectual model of thinking somehow has a strong foundation in this study. *"Divergent thinking is clearly the backbone of creativity assessment and has held this key position for many decades."* (Kaufman et al., 2008:p.14). The four main divergent thinking components such as fluency, flexibility, originality, elaboration are the essential feature in the expansive thinking process. Random possibilities spurring out in search for appropriate order until reflective convergent thinking system triggered to filtering out the most appropriate application of an idea. In further process according to Guilford presumably requires other mental operation such as cognition, memory, Divergent Production, Convergent Production, and Evaluation (Barlow, 2000) Those mental processes will somehow correlates with the Jungian intuition role "*...the conscious and unconscious will integrate during individuation points to the important role for art and its communicative, symbol making aspect.*" (Nutting, 2007: p. 22). The individuation correlates with the self expression that determining the characteristic of children expressions either in play or in their artwork that goes along with certain behavioral and personality trait. Along with the desire of release in Freud intuition concept, their expression not only constructed by their unconscious base but also the environmental structural system in the class. Following Read mapping of mental characteristic in creation process their drive will possibly span from logical system, emotional feeling, perceptual sensation, and intuitive expression (Thistlewood, 2002: p.8). Guilford thinking model in other occasion, creating a structural mapping that range the creational aims from main global component to a uniquely unexpected random quality of expression that rise from children excessive exploration during their creation process. These presumably complex processes of creation conducted by simple modification process as the effort of children ideational concept of application as in the bloom cognitive structure (Krathwohl, 2002: 214). Those perspectives somehow correlate with Amabile componential theory of creative thinking that relies upon cognitive flexibility to express their vision of symbol.

According to Kirton Adaption-Innovation Style (KAI) modified by Treffinger (Kirton, 1994; Treffinger, 2003: p.322) there are three main structural frame work in measuring creativity such as, Sufficiency of Originality, which measures a preference for a few, very good ideas versus generating many ideas. ("*Let's have one good idea* vs *Let's generate many ideas*"). Efficiency, which measures a preference for small-scale, specific ideas versus inclusive, global ideas. ("*Attention to follow up details* vs *Broard strokes*"). Rule conformity, which measure a preference for working within the rules or ignoring them. ("*Let's go by the book* vs *Lets ignore the rule*"). Within those three major frameworks contains two different polar traits that representing children creative style. The group works that is designed in this research making their expression much more complex and interesting to explore to. Every expression that comes out of their thought will have to meet the acceptances of their peer, so that their ego taking a longer route to reach the expected point regarding to their confluence. In this mater, children not only have to express their creative abilities but also need to negotiate it with their peers. During the creative and negotiation process every children encouraged to explore many possibilities to fill the psychological gap of creation. This vision of creativity is well assembled with Treffinger model of creative endorsement. According to Munandar (2009: p.172) this model is considered as the most appropriate form to support the project base play approach that was constructed by three stage of operation. The 1st stage mostly builds to encourage divergent thinking activity regarding to the problem. The 2nd stage will allows children to do some experiment based on their ideas that formed in the earlier stage. The 3rd stage is the actual process where children get engage to the problem and applies their most appropriate ideas to solve the problem and finish the project.

The measurement of creativity will depends on the perspective vision of creativity. The psychometric approach to creativity taking major ground base on Guilford perspective in the concept of thinking and creativity. Within the Guilford thinking model, divergent thinking concept is the most relevant form of creative thinking process followed by miscellaneous convergences to filtrate the random possibilities during the reflective process. "*Psychometric theories mainly are the study of psychological measurement which involves the test such as questionnaires… They concentrated on divergent thinking as the basis of creativity and devised test that emphasized the assessment of divergent thinking*" (Li, 2010: p.16). The psychometric approach to creativity making its exploration mostly based on mental process and its form of creative performance as it known to the operational area of TTCT. The TTCT itself was recognized as the expansion form that developed from Guilford concept of divergent thinking. "*Building on Guilford's work, Torrance (1974) developed the well-known Torrance Test of Creativity Thinking (TTCT)*" (Li, 2010: p.28). The following test that used to measure the progress in this research mostly based on TTCT in figural section. This figural test observing children abilities in pictures construction or forms assembling, completions, or modifications (Munandar, 2009: p.65). While on the other occasion, those figures that need to be constructed adapting some verbal test characteristic like completion or construction

of an odd form. The main indicator for children achievement would be signified by their capabilities in assembling four different faction of form, ranged from main form, accessories, additional detail or additional form earn from class environment.

Communication abilities often became major basics of children exploration and interaction within their environment. Ever since their early ages, a child intuitively makes various efforts to communicate their feelings. Communication abilities in this research mostly focused in how they express their ideas and feelings to others during their creative activity. Not only in expressing it, their ability in making certain kind of respond is taking the most part of this research. These two polar reactions are the major group efforts as Day preferred to argue that the linguistic activity basically made of two different actions such as expressing and receipting (Day, 1983: p.69). They will expressively communicate their feelings and each other ideas during the creation process. Rahmat (2009) identify that this kind of communication process could also applies to a small group conversation. Elaborating the communication process named by Day, Rahmat categorizing this proses into four different activities like, confirmation, disconfirmation, questioning, and answering (Rahmat, 2009: p.170). Children communication effort is also interesting features of their activity like the study in their creative patterns, during the conversation, children usually taking different role of action in expressing themselves or receipting others. These communicational pattern somehow not really depend on their motivation during the process but rather been a style that applied in their communicational efforts. Basically, these characteristic are part of their creative performance where they try to discuss their ideas whit each other, their expression, curiosity, and flexibility in communicating their ideas are the important part of the action.

B. RESEARCH METHOD

The quasi experiment research is actually conducted in TK Sejahtera, Bandung. The participant of the research is ranged between 5 to 6 years old, which was grouped, based on some specific similarities to the group developmental characteristic in creativity and communication abilities by using the quota sampling system.

The Treffinger model was the main base of program application that facilitates the framework of project base play approach and constructive play method. The constructive play and the communication process aimed to support the problem solving project within the play which taking three staging process like, Exploration, Experimentation, Project completion. The creative measurement that using TTCT figural test heavily based on the divergent thinking process so that it will covering the free flowing creativity within the process that supports the nature of early children typicality, while the creative style is constructed by adapting some of the KAI and Read creative self expression concept that comes together through four main creative style. On the other hand, the communication abilities adapting the Polaris transactional process within the small group activity that ranged from expression and receipting activity. This process constructed with some of behavioral pattern that

ranged from confirmation and disconfirmation. Those frameworks are assembled to construct the instruments that used to observe and collect the data of children performance.

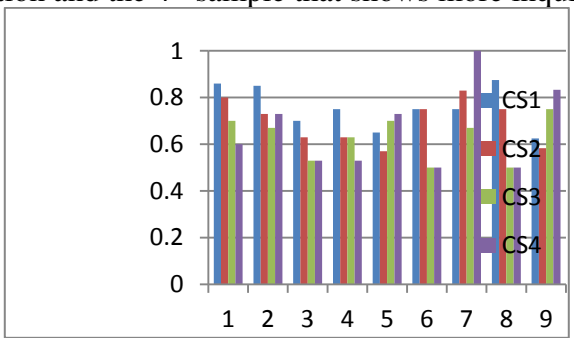
Table 1. Framework & Instruments

Creative Style	Adaptive Problem solver, Unique, Enthusiastic, Inquisitive
Creative Expression & Communication	**Creative Thinking**; Original, Flexible
	Behavioral & Personality Trait; Curiosity, sensitivity to problem, confidence, enduring the elaboration, Extraversion-talkative.
	Cognition; Application, Abstract thinking
Project base play approach-Treffinger Model-constructive play method; Preparation Stage**,** Experimentation Stage**,** Application Stage.	

The research was conducted by following the research design in nonequivalent Pretest-Posttest Group Design. (McMillan & Schumacher, 2001: p.343). The following treatments to the experiment group during the process are based on the application of Treffinger Model of creative endorsement within the framework of the project base play. The analysis on the data that was gathered during the process is using descriptive and inferential system by using parametric statistical analyses to analyze the data and making some conclusion.

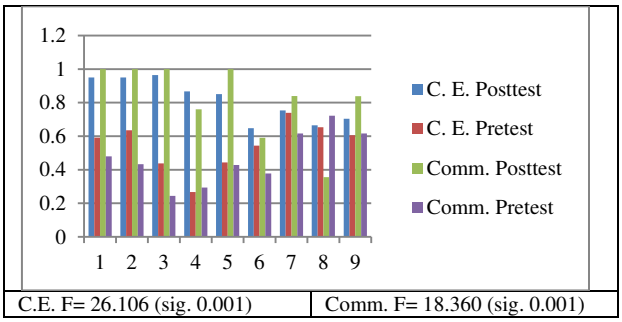
C. RESULT

Based on several data gathered during the research, the significant difference shows the progress of children creativity and communication abilities. Within some close observation in the experiment group, children creation tendencies mostly weight in the 1st creation type with only one sample that placed in the 4th group. Differ from the experiment group, two samples in control group shows more tendencies in 4th type creation group with the other two samples placed in the 2nd and 4th group. Regarding to those findings, children in the experiment group having most creative style as adaptive problem solver and inquisitive rather than other. On the other hand, the control group shows similarity except for the 2nd sample that prefer to work on the tiny and unique creation and the 4th sample that shows more inquisitive behavior.



Graph. 1. Creative Style

After enduring several treatments, certain progress occurs in children creative expression and communication ability. Their creative expression ability shows most progress significances compared to the other group with p= 0.014. The progress also applies to their communication ability with p= 0.034. The result of the experiment group in the posttest is ranged above the other characterized group on both dependent variables.



Graph 2. Posttest (Creativity Expression & Communication)

Table 2. Multiple Comparisons (Creative Expression & Communication Ability)

(I) Klmpk	(J) Klmpk	(I-J)	Sig.	(I-J)	Sig.
Pretest	Exp.	-.44154*	.000	-.57620*	.000
	Control	-.21742*	.016	-.28045*	.044
Exp.	Pretest	.44154*	.000	.57620*	.000
	Control	.22412*	.014	.29575*	.034
Control	Pretest	.21742*	.016	.28045*	.044
	Exp.	-.22412*	.014	-.29575*	.034

*. The mean difference is significant at the 0.05 level.

Within ANCOVA, the application of the Treffinger Model of Creative endorsement showing significant effect to the children progress more than the characteristic of the sample creation style (F= 57.186 within sig. 0. 001, ES=0.92 (51.6%), sR Square=0.8) the applied model currently making large of effect significance difference between those in experiment and in the control group. The same effect also applies to the children communication ability within the strength of 38.2 % (F= 3.084 within sig. 0.130, ES=0.333(21.3%), sR Square=0.27) the significance value strongly affected by the base condition in pretest that shows major progress within the experiment group. According to Cohen (1988; Becker, 2000) the effect size scaled in 0.2 shows small effect, 0.5 = medium effect, 0.8 = large effect, so that the experiment having large effect in the creative expression and medium effect to the communication ability.

Table 3. ANCOVA (Creative Expression & Communication Ability)

Communication	N	Mean	SE
Experiment	5	0. 955	0. 099
Control	4	0. 652	0. 114
Total	9	0. 804	0. 063
Creative Expression	N	Mean	SE
Experiment	5	0. 938	0.021
Control	4	0. 666	0. 025
Total	9	0.8169	0.014

D. GENERAL DISCUSSION

The project base constructive play that implemented in the research mainly focused on arranging four major components that could be applied during the activity. The four major components designed to meet their preferences such as, main object, detail formal accessories, detail color accessories, and other random component. Children encouraged in constructing the works in such possible way according to their preferences of creation area. These preferences somehow show children creation style regarding to their mental preference. Relating to their expression as Read mentioned about four major mental concept in the creation of art (Thistlewood, 2002: p.8; Read, 1943; p.145), their creation style mostly weight in the 4^{th} and 1^{st} material groups. Children mostly prefer to work on the main object and trying to elaborate it in such way to create some artworks and one sample seems to be more inquisitive and shows more flexible thinking to explore other possibility during their creation process. Their creative style engaged within the problem solving process that extends many possibilities in making better artworks but somehow less innovative. On the other hand, the manipulation of 4^{th} component somehow rarely found during the research which thought to be the reflection of the integral act of creation. This manipulation effort requiring children sensitivity not only to the object and their accessories but also to the potential transformational arrangement regarding to their environment and their autonomy of expression. In some occasion, children show this stage of ability only then, they failing the modification of other three components so that they were not making the good impact in the whole creation process. Other assumption thought this as a random confluence that accidentally comes out but failing the elaboration process. Following those findings it reflecting their "I" construction as an adaptive problem solver and inquisitive person. It wasn't really an odd things regarding to the treatment during the experimentation. But on the other hand, it is shows their lack of autonomy in their creative expression. While the sense of identity is starting to bloom, their autonomy of expression is something beyond them even though in Piaget perception of cognitive development, children in their age were known as an egocentric person. Children base of artistic development which is thought to start with favoritism (Parson, 1987; Efland, 2002:28) is actually not based on their personal autonomy of expression. Their preference of expression somehow builds on act of imitation as Wilson & Wilson though about their artistic development. "*These are forms learned in a social context largely by imitation. In*

their view, children are concerned not with representing objects in the real world but with the production of the visual signs of the culture." (Wilson & Wilson; Efland, 2002: p.45). While Feldman (1994; Chen, 1997) consider that environmental and cultural difference being one of the major factors that shaping children characteristic in their creative expression, Gidens purposing a different perspective regarding to tradition and the depth of cultural factor. Gidens differentiate the well-structured tradition and the temporal social influence within the trend that creating certain level of addiction syndrome that detaches our self (Gidens, 1994; Zaman, 2003: p.33).

Children creative achievement on the other hand shows progress in general perspectives regarding to applied model of creative project. The Treffinger model of creative endorsement successfully arranged with the constructive play method so it was well supporting the children creative development. Along with the model children aggressive energy is well channeled to work in the creative play base project. The wide ranging coverage of mental and emotional activity which was emphasized in this model (Munandar, 2009: p.172) taking major role in directing children activity during the creative process. The first phase of the model facilitates children desire to play and exploring various possibilities by activating their divergent thinking ability within the process. In this moment, children actively engage in such kind of interesting exploration activity to recognize the environment and the challenge or the potential possibility in constructing their idea. The next phase of the process is when they start to focusing their activity in certain possibility of the project. Here they try to negotiate their idea with their peer in the group and will probably to enrich their idea and making certain experimentation to determine its possible application. Children creative expression is well covered in both mental creation regarding to the works and automate expression when they try to negotiate their idea through some discussion. Their exploration and expression are not only requiring some experiments but also the approval of their peers in their team. The last phase of the model is encouraging children to actually assembling their idea through some concrete artwork. The appreciation process is actually goes along to meet children perspective and self-confidences. The actual appreciation process is giving them a concrete insight to the artwork possibility that created by their peer which supposed to broaden their perspective in the possibility of constructing the works. The free flowing creation and discussion within the process will also help them to build their confidence and communication ability.

The progress shows not only in children creativity but also their communicative abilities. In general children communication activity bout in, confirmation, disconfirmation, questioning, and answering (Rahmat, 2009: p.170). The major polar reactions during the communication activity (Day, 1983: p.69) will also reflecting the four main communicational efforts as described above. Those inscriptions also proved in the children activity throughout the creation process. However some interesting characteristic of their communicative aims shows their deference in style of communication and how they communicate and discuss their ideas with their peers. Regarding to their characteristics, three communication styles

were naturally formed in the progress of the project. The three group characteristics consist of children preferences to explore the matter with questions, negotiate the situation through some discussion, or just following and acting like an observer or perhaps putting more focus in creative activity in the project. Children polar reaction within the process somehow shows good sense of balance. The communication form however raises an interesting appearance in their activity. They were not just communicating verbally but also through some complex interaction like gestural figure and facial expression but then again, verbal expression indicates better communication ability. Regardless, the communication style doesn't reflect the means of behavioral pattern like the creative style. The communication itself is the actual form that reflecting their cognitive abilities.

The significant difference shows in control group where they were almost completely unorganized and fail to make a good interaction and tends to be more defective and remain aggressive. Their activity leaving the project unfinished and fail to make any performance that show their creative abilities. Although the progress only ranges in relatively significant rate, the application of the model somehow focusing the children to the problem and target in the project and it gave some good contribution to their learning process. Their natural creative expression is well channeled through the application of Treffinger model. The overall report of the research is shows that the Treffinger Model in the project base play proven to be effective in helping children to gain significant progress in their creative expression and communication abilities. The difference in one of the children grade in the control group was relatively insignificant either in the pretest or the posttest that supposedly have been covered by the framework of the research that does not including the knowledge base factor. The same thing applies to other characteristic of the children within the coverage of the research framework.

E. SUMMARY

Based on the result of close observation, children in the experiment group having most creative style as adaptive a problem solver and inquisitive rather than other type. On the other hand, the control group shows similarity except for the 2nd sample that prefers to work on the tiny and unique creation. Even though the creation style thought to be an important part of children development, somehow it does not causing significant effect compared with the application of the model. While on the other hand, the effect of the treatment looks strongly significant only in the creative growth with ES=0.92 (51.6%) and medium significance at ES=0.333 (21.3%) for the communication ability. After having several experimentations based on the application of Treffinger model of creative endorsement in the project base play is proven to be somewhat effective in extending the concept of creative self expression with most significant progress compared to the other group with p= 0.014. The progress also applies to their communication ability with p= 0.034. The children natural conditions as an active and sometimes aggressive figure are carefully directed to work on the project through somewhat playful circumstances that range to their

various expression characteristic so that it requires further modification in the use of artistic material and teaching method in order to give them a better stimulation and covering children various creative expression.

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