THE RELATIONSHIP OF
CHILDREN'S PLAYING-SPACE AND THE GROWTH OF CREATIVITY:
A COMPARISON STUDY BETWEEN CONDITION IN
INDONESIA WITH DEVELOPED COUNTRIES

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Abstract:
There are various differences between education[1] system in Indonesia and this in developed countries. Influenced by colonialism period therefore our education style today does not enough consider attentively to essential factors. Noted, there are only restricted to a small number of schools have applied specific methods in learning process. This writing describes about ideal requirements of playing-space (playground and playroom) in term developing children's creativity. Children's playing-space (playground & playroom) as place besides of classes in where children's learning process take place. This writing also presents on several aspects examples which regarded as main factors as stimulator of children's creativity. Nevertheless lastly, indeed, it will still be needed, more thought to know how to find better designs.

1. Definition of Space

Space is divided into indoor and outdoor.
 Indoor (room):
According to Ching (1992), indoor is an area where is limited by massive parts (for example: walls, floors, ceilings, partition, and so on).
 Outdoor:
Meanwhile, outdoor is an open space, no buildings stand up upon the land, has social functions so that it can be place for people to gather together here (Morish: 1994).

2. Playing as Basic Activity for Children

Playing is a basic activity for children. Playing-activity can not be separated from child since he/she was born. No one can restrict or discourage child to play, or on the other words principally a child doesn't need an instruction for play. By play, child can slowly learn any rules within environment. For example: while a group of children is playing "doll's house", they are actually practicing a simple learning about any roles within daily activities of human being. According to Senda (1998), there are several important aspects of playing activity, encompass: playing-space, time for playing, friends in playing and variation of completion tools. Therefore, from this explanation above, the growth of child's personality is actually influenced by environment and also by the completion of playing tools.

Children's playing-space is an area where the children playing activity take place. However besides space, completion of activity is also certainly required to create "nuance" or "special atmosphere", they are following aspects, encompass: tools, environment, and friends, all in the similar context; playing. In general, emotion of a child can be seen in short-duration of playing activity. The growth of personality is caused by children playing habit, therefore indeed, it would obviously influence to their skills.

3. Playing as a Part of Learning – The Condition in Indonesia

Playing is as the way for children to learning something, trying her/him self on free experiments. By playing, moreover children can also find meanings of life. Playing is spontaneous activity emerge automatically, giving unhampered, spontaneity, and encouraging feeling curious within strong imagination (Trisuharsono(2000) quoted from Dafnar (1969)).

Many functions of playing are: as the way of learning process to know many kinds of rules in surrounding, as the way for releasing emotion, and also as the way to understanding surrounds by exploration maximally. Physical growth aspect can generally be stimulated by playing activity. There are several utilizations of playing: as push factor of physical growth, as source of learning process, and as stimulating factor of creativity. So that, no doubt, playing can not indeed be separated from overall children's learning process.

If we look more deeply, there is still significantly difference between education system in Indonesia and this in foreign countries, mainly if comparing with this in several developed countries. Since colonialism period, education has been being practiced in Indonesia. Nevertheless, once, the tendency was feudalism education system, in which education only for restricted people who categorized as high class. This is, moreover, has purpose to obtain colonial's accomplishes. Often in our mind, school is imagined only as formal and simple classroom, so students reading here in long time, doing a large amount of homework, getting strict instructions from teacher, and so on. School have not enough consideration of democratic-style yet, as an example: using two way learning method. Formerly, CBSA[1]-programme was ever practiced, but the implementation was still relatively similar to many earlier methods.

Here add

It's ironically situation, while learning time is finish, often occurs "*missing-freedom syndrome*" of students, in which students express by enjoying many activities that could be included in freedom syndrome. For example: watching TV, walking around of the mall, driving around the city, even broken inside students also frequently occurs. If look into more deeply, there is the tendency, students do not feel comfort, when they study at school. Therefore, it is not surprising, if students who have graduated only have restriction of ability due to stressing condition of education, they are not creative enough to work. Except, it may not be occurs if they search co-curricular activities by them self that therefore can help to develop their specific personality.

In our habitually culture, in fact, majority of us are too strictly in separating learning and playing. In contrary, from many explanations above, we can know that playing as one aspect of learning-process. Playing is activity contributed on development children's skill in the present as well as in the future. Education is the way to developing generations, meanwhile reforming generations is not easy to do, due to many related factors. On many theories, it is indeed has been stated the wider meaning of "education". However, in fact in Indonesia, there are noted only a few of schools have applied progressive system of education.

Meanwhile, the present generations are actually the result of teaching process of the last generation. Let's we see more, pre-school education is started at the age of 4 year or 5 year. Nevertheless, only a few parents can enrol their child to playgroup at the age of 2.5 years or 3 years. So that, a large part of times own by children is merely be spent at home and surroundings. From this statement, it can be concluded that needed comprehensive thought for our education, not only at school but also at home. One or more of not ideal condition may be effect to the growth of children's personality. If in many political issues are talked about democratic issue and so on, however on the other side it is no doubt Indonesian's education system, which still highly containing feudalism system, is certainly require to be reformed.

Before we are going to analyze many examples of playing spaces in several foreign countries that have designed as well as applied better playing spaces, it is essential to know the position of early child stage within all of human stage of growth. Following is the explanation:

4. Theory of Human Growth - Seen from Stages by Age

Categorization by Elizabeth B. Hurlock:
Age 0 – 4 years   :   Early Child
Age 4 – 12 years   :   Child
Age 12 - 16 years   :   Adolescent
Age 16 – 20 years   :   Adult

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[1] Cara Belajar Siswa Aktif (Learning Method of Active Student)

Specialization of Ability by Piaget

Stage	Age	Specialization
Sensory motor	0 - 24 month	- The growth in scheme of reflects to know surroundings - Getting ability in perception of object determination
Pre-Operational	1 – 5 year	- Utilization of symbol and arrange internal response, for example in: playing, language and imitation
Concrete Operational	5 – 12 year	- Getting ability to think schematically to concrete problems or objects - Getting conservation ability
Formal Operational	12 – year	- Getting ability to think schematically to problems of abstraction as well as hypothesis

The Growth of Space Conception based on Stage by Age

Stage	Age	Space Conception
Sensory motor Pre-Operational	0 - 24 month 1 – 5 year	In this stage, a child begins to understand about sequent and route, but this ability has not yet completely grown up. In this stage further is exist, the growth of typology relationship, encompass: 1. Proximity or nearness. 2. Separation. 3. Order or spatial succession. 4. Enclosure or surrounding. 5. Continuity
Concrete Operational	5 – 12 year	In this stage a child begins to understand the meaning of projective space in which they : 1. Able to understanding as well as to operate properly whole of situation in sequent and object. For example: linkage between the way to school and home. 2. Understanding alternative of space and that's of choices than arrange relation of space that quiet new for them.
Formal Operational	12 – maturity	Getting ability to think. In this stage, child begins to draw space clearly as well as logically (euclidean space), in which children can abstract the linkage among whole of spaces.

Source: Irwin Altman & Daniel Stokols (Handbook of Environment Psychology Vol 1, 1992)

Associate with the stage of growth above, there are 3 stage of scholar age in Indonesia, encompass:
1. Playgroup and Pre-School: 2,5 - 7 year
2. Elementary School: 7 - 13 year
3. Junior High School and Senior High School: 13 – 19 year

Each education stage has the same importance in term developing generations. However from the explanations of Piaget, Irwin Altman and Daniel Stokols can be seen that there are linkages between 3 stages above. So the earlier stage will affect to further stages and so the failure of acts to primary stage may be affect to next stages (adult and/or mature). From many literatures, its can be known about golden age 3-5 year. However in Indonesia, due to restriction of income then only a few parents can enrol his/ her child into Playgroup, *Taman Kanak-kanak* (Kindergarten) or Preschool. Consequently, majority early child can merely spend his/her time at home and surrounding. Moreover, a part of them must help their parents to gain added income. It is our ironically phenomena however thus is all our reality.

+ about golden age

5. Children Playing Space in Developed Countries

In fact, it is not difficult to know whether design or application of playing spaces in Indonesia is different with these of in developed countries. We can more obviously see by reading literatures, watching film on the TV, or accessing to internet. Explanations below present on 5 aspects which are more vividly perform while we

observe children's playground. By those so illustrations we may know children playing facilities in foreign countries.

## 5. a. Example of schools which have Specific Designs of Children Playing Space (Playground/ Playroom)
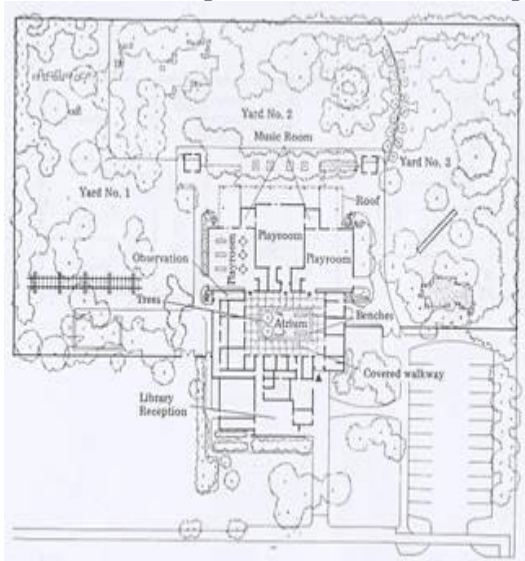
Bing Nursery School, Stanford, California. Architect dan siteplanner : Clark, Royston, and crew. This plan presents playground, playroom music-room, and yard. All of them supporting academic activity.

Prototipe of Nursery School for 40 Children, England
This plan presents playground, playroom music-room, and yard.
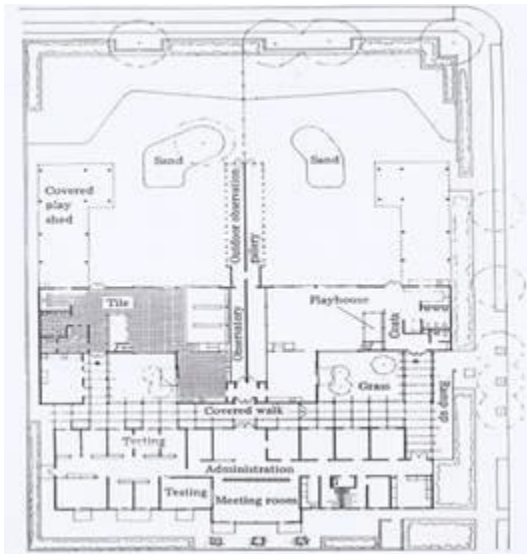
Harold E. Jones Early Education Center.
Architect : Joseph Esherick and Assocs, San Fransisco
There are provided by playing facilities as: playhouse, playground (sand).
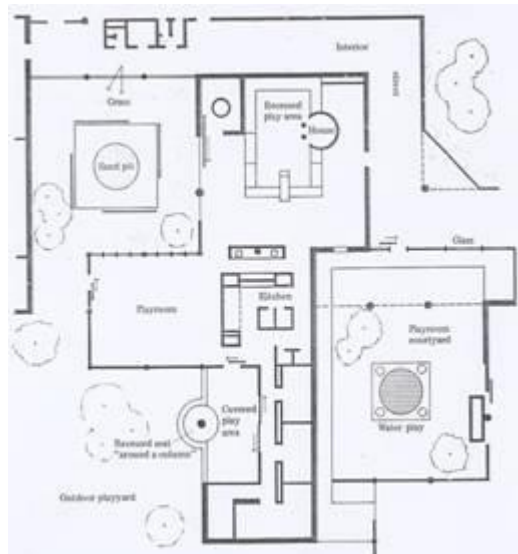
Home for Children, Amsterdam, Holland. Architect : Aldo van Eyke
Playing facilities which is provided: cover play area, playroom, playroom courtyard (sand pit and waterplay), outdoor playyard, and recessed play area.

No less attractive are to be drawn below about building-design which have consideration into local cultural aspects, for example, it can be seen in Aboriginal School-Building that was created by Edgar Idle Wade Architects. Specific character of building's design therefore could create the different "nuance". It seems, though creativity as well as innovation are have to be developed, local cultural aspect could not be forgotten. Considering cultural aspects within school-design is also ultimately important within specifically developing basic personality of children.

The Winner of Merit Award,
Djidi Aboriginal School, Edgar Idle Wade Architects.
Esterior Design of School which have consideration of
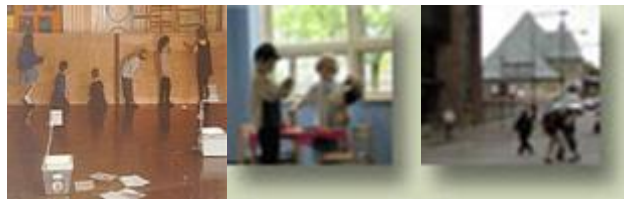cultural aspect.

Developing creativity in playing music in schools, modern music and also
traditional music

Children Playground at JAC

The Winner of Honour Award,
Hi Tech High School, Carrier
Johnson Architects

Examples "freedom to create". Training student's creativity within doing something,
not only to know but also to experiment deeply

Meanwhile, several pictures above show how "nuance" or "atmosphere" is influenced by form, space, colour and so on. By attractive impression, enable to raise chance of children in tend to process within resulting good quality of works. Unfortunately, the general tendency in Indonesia student is too obligated highly to read books. Often, not enough balance between writing and supporting pictures (drawing illustrations). Also student is too more learning of theories but lack of practicing various application aspects.

Therefore, several pictures below show how activities in playing-space that can fulfil function to making know, to making near then to stimulating positive behaviour to environment as early as possible. There are to be presented that it can be done by using plants as media and also supported with various completion tools.

Children are planting flowers and the other plants, in Programme
Grant Applications to Yorkshire Bank's Conservation Award Scheme
Supported by: Forum for Education Arts Development and an Arts for Everyone Lottery (1997)

5. b. Training Ability to Adventure in Environment

If we look into more deeply, it seems that education system in Indonesia is still has excessive orientation to obtaining a "sweet child". They should attend to a lot of instruction, forbidden to getting dirty, forbidden to have too many variations of behaves, forbidden to move much more actively, and so on. In East Java, it is introduced a terminology that a kind child ("*budak bageur-in sundanesse race/ anak baik-in indonesia*") is must be obedient, must have carefully acts, never opposite, never making trouble, and so on. A child who have more actions, called as naughty child. It is the same of tendency, occurs in the others races, for examples in: Central Java or several races in Sumatera.

In traditional farmer family likely the nearness to environment can more automatically emerge, but it is contrast with the modern families. The more so, now days while there is new tendency of multi character of jobs, so environment becoming far away from our daily life. On the other hand, environmental knowledge is also often only has restricted orientation to environment. As the comparison with foreign countries, below are several pictures that show how to keep nearness between children and environment.

Sand and Deck at Kihikihi Kindergarten

Swing Bridge at Otorohanga Kindergarten

Moveable Equipment

Children Centre's, Kid Camp Before and After School for Pre School and K-6th grade

Holmes School in Oak Park (1981) U.S supported by Consumer Product Safety Commission (CPSC)
Inspiration by Handbook for Public Playground Safety

Indeed, the lack understanding of making good relationship with environment can also rising "feeling confuse" in term finding the right meaning of environment. It is may be predicted as one factor using the high destructions of environment in Indonesia. Adventure has primary effect to the growth of children creativity. As an easy illustration in which we could be sure, let's see how the expression while someone enjoying holidays-together with his/her families or friends. Almost all people very pleasure of these, near to water, land, plants, sunshine, air, and so on. No doubt, human as part of nature and also nature is actually for human being.

5.c. Creativity due to Seeing Natural Environment

It is obviously important to consider natural environment. We should feel envious, while we see forests condition in Swiss, England, New Zealand, Australia, and so on, the more so if we see many foreign countries with restricted in the width of area. However, those of the governments and also inhabitants usually give a better attention for their natural environment. Besides that, their education systems have attentively deliberated to

nature. Often, students visit opened natural environment. The difference with the last analyze (5b), playgrounds in the nature is not certainly located near schools. Sometimes, it is far enough so they need transportation-facilities to get there, however, often transportations facility is also provided by schools.

Pictures below are examples of natural environment which getting better arrangement. Occasionally, these locations become the destination for families or students.

Location: London Borough of Southwark

Training ability to introduce environment and adventure within can encourage better feeling to near, to keep, to conserve, and to arrange optimally nature for mankind utilizations. If analyze deeper, in fact education system in Indonesia have not given enough understanding to the nature yet. Knowledge about environment may be quiet enough, but feeling near to nature can not automatically appear without adequate place in where learning process is taken place. Often, only a few activities in a step of education process (*catur wulan*) that have direct orientation to nature.

Restriction capability is may be predicted as early point which causing many destructions of environment. Thus, in fact, it should wisely consider our natural environment. By nearness feeling to nature, can then make we introduce more clearly, many problems in surroundings. Furthermore, the applications of those is regarded may influence the response to environment (rising good sense of behaviour). When someone is starting to be introduced to environment, it will be as one of essential inquiries to his/her creativity mainly in ability to managing environment.

5. d. Children Playing Space as Complements of Recreation Facilities

Besides within education activity, various non education activities in several foreign countries have also considered children playing activity. Designs of children playing spaces in developed country can be seen within designs of city's open space, environmental recreation facilities, malls, and so on. Pictures below present the application of that on several recreation facilities:

CONCEPTUAL PLAN
Koret Children's Quarters, Golden Gate Park

The Children's Playground at Golden Gate Park

New children's Playground, 40 meter from Centro Vacanze La Risacca (Recreation Facility)
63018 Porto S. Elpidio (Ap) – Italy

5. e. Designs of Children Playing Space - Considering Technological Aspect

It is also essential to considering technological aspects while designing children playing space. Technology can not be separated from modern human life. By technology we could find much more easiness in our life, and technology can create more dynamic life. It is obviously important to introducing technology to children as early as possible. As example, someone who had been introduced to computer skill since he/she was so young child (3 or 4 years) would be different with anyone who had recently been introduced to the computer in the age of-20 years. Below are several designs as examples of children playing-space, there are considering technological aspects.

Game corner for children at Cafe Ullreich

Several examples as suggestions in designing children playing-space (indoor): using animation system, lighting arrangement, and completion of video game. Suggested by Interior Architect and Artist – Milo (1997) for a Cafe at Pinkafeld – Burgenland - Austria

6. The Criticism:
The Relationships between Children's Playing-space with The Growth of Creativity: A Comparison between Condition in Indonesia and Developed Countries

In fact, education has the wider meaning, it must consider to the further purpose, *"to developing people who can arrange environment well and also wisely".* The background of this is due to all of part of components of knowledge are indeed undertaken from surroundings (nature). Therefore, space for education activity must be regarded has primary meanings and functions. It will not satisfy the right purpose if transform knowledge without supported by the right and also adequate facilities. Education is not only restricted "as the way to transforming knowledge". However, this is the lack understanding about it within our daily life. Whereas, in fact, it can impact to restriction ability of generations, then the possibility which present is **they do not brave enough to face any problems surroundings.**

While any foreign countries talking and supporting several important programmes, such as: high technology, computerization, sustainable development, sustainable environment, sustainable city, and so on, meanwhile there are often the contrary conditions in our country, as an example it is so hard to practice simple habits in our daily life, for example: 9 years of compulsory education, to be accustomed to throwing garbage in the right place, green environment programme and so on. On the other hand, in several developed countries, generations can be educated to maximally contribute to their environment. A large numbers of generations can be educated to be good scientists who resulting various studies. This statement is not mean that no one of researcher in Indonesia. However, as the real illustration, lets we compare either quantity or quality of researches in Indonesia with those of in Germany, Japan, China, England, France, A.S, U.S, or Australia. Comparing with Japan, Korea, Netherlands, England, Brunei Darussalam or Singapore, Indonesia is wider in area, unfortunately our environment does not has enough management. Often, even, many destructions to environment. Perhaps it is not wise, comparing our country with Japan, Netherlands or England because they were earlier in getting their independence-days than us. But, it is not too excessive, comparing Indonesia with Korea, Singapore or Brunei Darussalam. We have "the same age"

Return to the first paragraph in part 6 that have discussed about linkage between human resources and environmental resources in term of education, therefore, can be concluded that considering space in education is obviously important. **The right area (place and space) is primarily required to developing students ("educated object") not only become know but more than that, also should become able, smart, creative and innovative**.

Consequently, education should require sufficient capital for providing complete facilities, such as: buildings, furniture, teachers, literatures and so on. The more so, the condition out of schools has been growth so fast, completed with: internet, various channels of TV, various games in entertainment facilities, and so on. Besides lost of the real purpose, restricted facilities also impact to feeling boredom of students.

From all explanations above can be concluded that it is required balance among all of aspects within designing playing space, also includes the balance between nature and technology. Despite technological tools which are founded by people have been so progressive, people are actually, never can be separated with nature. So that, lastly it is needed the synergy and balance among aspects 5.b, 5.c and 5.d.

7. Conclusion

Designing of children playing-space is primarily contribute to the quality of generations. We can see statement within part 6, that is: **The right space is primarily required to developing students (educated objects) who not only know but also should become able, moreover it can be categorized succeed if educated objects also become clever, smart, creative and innovative.** Once more, writer want to confirm again the statement that have been stated within abstract, that this writing is not aimed to state that is nothing design equal to several examples which presented above. We have those, in schools, houses, or public facilities, but these are very restricted, regarded in quality as well as in quantity. It is associated with Senda (1992) statement that besides space and place, the completion of aspects is also required, encompass: time, friends, and tools, all in the same context: playing. In several examples 5.a – 5.e, illustration of application for those aspects have been presented, either in playroom or in playground.

This analysis has goal to search the right point view to open our mind in regard "space" as facility to transform knowledge. It is indeed still to be needed further analysis to find more depth understanding. Not all of part of examples above from foreign countries can fully be practiced directly, due to the difference of principle in cultural aspects. For example, in Western where democratic have been proportionally held in the whole aspects of mankind, includes equality of human rights among different ages. Therefore, the principle of education system is different (not identical whichever could be directly applied) either at school or at home. In sum, more detail of analysis to our cultural aspects will certainly be essential to be learnt, in term designing children playing space. As examples: Children in Java-island should have different culture with children in Sulawesi-island. Therefore, highly possible the playground's design will also be different.

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www.google.com about *playground* and *playroom*

[1] Education : Not only in the school but also at home
[2] teacher at school or parents at home