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A STUDY ON DESIGNING OPEN SPACE SCHOOL AND ITS RELATION WITH IMPROVING HAPPINESS AMONG STUDENTS

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ABSTRACT

Students in the process of socialization require a healthy environment and models so as to increase their performance. Since schools are the first model affecting students' personality, thus physical space of school as one of the important element for learning and education even in social perspective or spatial quality and its impact on students' development, play a major role. In this sense, happiness and vitality within school can lead to development of student in physical, cognitive, emotional, moral and spiritual dimensions, and if a damage to one of these dimensions seen, or to be neglected, the student will not achieve his abilities and competences. This study overviews literature review and necessity to making happy environment at schools so as to investigate research questions, using descriptive survey method. According to results, in viewpoint of education personnel and girl students, education facilities centered at designing open spaces within schools have the most effect on making happy environment at schools. Hence, proposing do's and don'ts in designing school environment given the existing limitations and facilities to modify improper approaches and move towards optimal approach to make happy environment are all main achievement in this study.

Keywords: *Open Space, Happiness, Education Environment*

INTRODUCTION

How to perceive environment is a key concept in mutual environment-human studies in micro and macro scales. Surrounding area or the real world as the transmitter sends all information in different ways to human, where human as a receiver requires environment. Today, in big cities, children have been surrounded in small apartments, and to compensate this, a little perception and study are required, i.e. thinking about building an area yet in contact with nature is required. Currently, what thought about school is just about classrooms that merged with community halls, labs and gym. In this sense, open space encompassing yard or garden has been ignored and all the attention has been paid on internal space. Investigate circumstances under open spaces in schools throughout the country especially developing countries indicate inattention to landscaping these spaces and their effective role in improving education and learning activities among students. This is in a way that studies conducted in most of the countries throughout the world including Australia, America and England have paid attention to this topic of interest, and reported the necessity to address more comprehensive dimensions of it in designing and architecture of schools' landscape (Stine, 1997). As functioning by open spaces within school required for physical activity and having entertainment for students, proper desining of schools can play a major role in making happy space for students, yet most of students in Iran know spaces of schools monotonous, without dynamism and happiness (Yasin, 2003). Currently, no distinctive plan has been considered for open space schools, thus there does not exist any significant relationship between class and open space. Since, student first of all requires being satisfied with great feeling, and tie with social and physical environments, thus characteristic of proper environment, necessary motives and incentives adapting with development stage must be taken into account, and this has to be included as a necessity for conducting the research.

Happiness

Happiness as a feeling of human varies in wide range from sever sorrow to server happiness. Happiness is the most improtant desired feeling that many equivalentns have been used for it including Joy, happiness, euphoria, well-being and etc. scholars have defined their view and imagination to happiness in different

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ways. Plato knows happiness a status in human that exists among three elements of wit or argument, feelings and desires for coordination and balance (Francis, 1999).

Aristotle defines happiness in three viewpoints: in viewpoint of typical people that know enjoyment as happiness, successful people that know happiness as an equivalent to good performance and scholars that know Contemplative life as happiness (Amir Hossain, 2004). Aristotle knows happiness as spiritual life (Aizeng, 1996). Locke believes that happiness is based on how many times desired events occurred. Argyle and Crossland know happiness as a combination of positive feeling, lack of negative feeling and life satisfaction. Happiness leads to entertainment and engagement in desired activities, through which possibility to develop physical, social and mental skills will be provided (Fredrickson, 1998). Indeed, happiness is called to privileges that a person judge on the desirability of his life quality, that is, happiness means to what extent the person is satisfied with his life (Veenhoven, 1993).

Given the topic of happiness, the person on one hand judges on his life, and achieves satisfaction or dissatisfaction in his life, and on the other hand finds positive or negative feeling regarding his judgment, and finally emerges a behavior and way of talking equivalent to his feeling and judgment (Dyner and Sah, 1997).

Happy School

School as an organization might be a happy or boring place. School might lead to tie, cohesion and high feeling among students and teachers, or make them discouraged. Schools might be inactive and static, and might indicate a sample of democracy or dictatorship, and can be participatory areas or a place for inattention to individuals. School must be a place at which students enjoy learning and living there (Oliva, 1999). The scenario for having happy schools stands on this hypothesis that effectiveness of learning process within education areas in addition to content and nature of education contexts, play a major role in students' happiness, and how to stimulate desire and need of students to learning and living in schools (Abbasi, 2004).

Effect of Making Happy Open Spaces Schools on Learning Process

Among different social groups, children and adolescents more than other enjoy physical beauties, thus when they enter to school, seek to beauty and are attracted by beauties. Hence, expanding beauty is emphasized in education center as the necessity of attention to students' mental and emotional need perceived. In general, it can say beauty builds tranquility and happiness in addressee and paves the way for learning. For this, beautiful school enjoys more desirability and attractiveness for students, and paves the way for active involvement by children and adolescents in education area, affecting students' learning (Feizi, 2010).

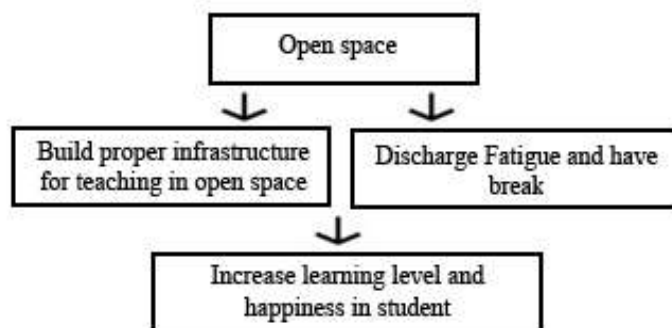


Figure 1: Effect of open space schools on improving learning process (Feizi, 2010)

Open space in surrounding school that is recognized as yards of school as a part of physical space plays a major role in learning process. Students after a session having education activity, exit the class for a minute to have a rest and go to yard for break and then return to class. Attractive yard helps for students' mental refreshment and prepare them for involving in next class, whereby their performance will also

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increase later (Ghazi, 2003). Open space in addition to supply a place for physical activity, having entertainment for students can be used as an aid instrument for students. Proper design of open space can help instructors in their education process, will encourage students in their teamwork activities, whereby sense of creativity and natural space will emerge for increasing students' academic level (Feizi, 2010).

Factors Affecting Students' Happiness

The context to examine this study based on effect of schools' open spaces compared to other effective factors on students' happiness by preparing a questionnaire, was provided to study a variety of factors affecting students' happiness and distributing the questionnaire in schools. This questionnaire as a happiness questionnaire was obtained from the same study in the context of education psychology, which contains 40 close questions, adapted with theory of happy school that evaluates effect of six different factors on students' happiness (Abbasi, 2004).

The factors affecting students' happiness in this questionnaire include:

1. Interaction between teacher and students
2. Students' engagement in class activities
3. Teaching methods and teacher's evaluation
4. Content of courses
5. Organizational atmosphere of school
6. Education facilities

Quality of open space as the main aim of this questionnaire has been set in the series of questions for education facilities.

Interaction between Student and Teacher

Formal and informal communications by students with school personnel especially teachers given school's activities and events can be an instrument for increasing their motives, self-belief and happiness. Good teaching method by teachers and their proper interaction with parents to improve school plans can be an effective mechanism in building an effective relationship between school and house and then to reach to the feeling of tranquility (Torkzade, 1999).

The factors below can be samples of how to communicate with school

- expression of interest and attention to Students
- teacher's involvement in curriculum of students
- develop sessions for students, teachers and parents (Abbasi, 2004)

Effect of Students' Participation in School and Class Activities on Improving Happiness

Students not only are a part of school community, but are a part of community. Student is in contact with his school, a large group of students and groups outside and inside school that can have hundreds of interaction in a day. Social atmosphere of school, classroom, and community can largely influence students' achievement and behavior (Torkzade, 1999). When students recognize themselves self-sufficient in education activities, then engage more in their aims and curriculum, whereby can succeed in their learning process. In addition, if students know themselves self-sufficient and control their curriculum, their motives to curriculum will then increase. Students, to engage in school, obliged to adopt proper and clear systems in each education unit. The simplest way in this context is developing groups of volunteer students under control of interested teachers and staffs in different contexts at school, e.g. holding the morning ceremony, holding important ceremonies like School parents and teachers association meeting, sports, Extracurricular activities, the school buffets office, school security and etc (Torkzade, 1999).

Teaching Methods and Teacher' Evaluation

Teaching is accordingly a bilateral process that instructor's activity relies on using different methods. Some have known teaching as an interaction and decision making, where on instructor using planning strives to develop a favorable condition replete with happiness to make change in learners (Abbasi, 2004). Activating learners aims to breed up their creativity where on their self-confidence and happiness will be resulted. Efficient teachers have perceived the importance of problem resolving in making students

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happy, and have emphasized on evolution of problem resolving skill in different forms in curriculum. In this method, teacher must design courses as a problem for students or encourage them to resolve problems and then encourage the students to resolve problems, and then motivate them for problem resolving.

Curriculum

The important problem in enhancing learning and motivating students for learning is connecting Curriculum with learners' life. Curriculum must firstly associate with students' life, rather than being replete with abstract materials.

Secondly, teachers must associate Curriculum with learners' life. John Dewey in defining happy school declared the most significant defect within current system is not just poverty and its outcomes, but is the point that individuals address activities and trainings that are not interested in. In his opinion, in case Curriculum regulated based on students' desire, learning and all School functions will be interesting for students (Karimi, 2003).

Education Facilities

One of the most fundamental missions within education system is building a favorable education area in physical perspective that can affect student's perception and academic achievement, and their happiness and internal motive.

Arthur *et al.*, have referred to importance of physical status of school and classroom on how is students' behaviors and ability of learning. In their viewpoint, importance of school's physical importance derives from the point that students and teacher spend most of their lifetime in school, thus school and class must require characteristics including convenience, attractiveness and etc.

Increasing lighting and better distribution of it in classes, using air conditioners, using happy and bright colors in painting walls, doors, windows, chairs, developing green spaces within schools provide a favorable area that avoid feeling of boredom in students (Arthur *et al.*, 1993).

In some cases, improving physical spaces of school lead to better movement, and sometimes to enhancing feeling of individuals, and indirectly influence their performance (Alyasin, 2003). Hence, planning to improve physical facilities of school requires Curriculum, because lack of happiness in school and stereotyped affairs cause hopelessness in students (Accessed November, 2010) (Simplico, 2001).

Organizational Atmosphere of School

Organizational atmosphere of school is the product of effort and mutual reactions and ties among managers, teachers, staffs and students. They strive to build a balance between personal, cultural, and structural dimensions of school. What comes from the mutual effects will be forming values, beliefs and social norms (Alaghe, 1998).

Research findings indicate that organizational health is in association with students' performance. The more school is healthy, students' academic achievement level will be higher in mathematics and reading (Hoy and Miskel, 1999).

Further, organizational health is in positive correlation with school effectiveness, strong school culture, and teachers' participation in decision making (Alagheband, 1999). open space school associates with lower academic decline, more students' satisfaction (Alagheband, 1999).

Evaluate and Analyze Results from Happiness Questionnaire

Open space schools regarding the obtained results from analysis and evaluation of questionnaire include sufficient potential to achieve optimal quality, and will have significant effect on students' happiness in case of getting close to favorable status, because students have stated yard and open space as the most significant factor affecting their happiness, and further referred to developing green space to increase their happiness.

As observed in diagram below, the median and quartile in box plot associated to variable "education facilities" are higher than other variables.

Then, respondents believe that education facilities will have the highest effect in students' happiness. To observe this, note to mean of variables.

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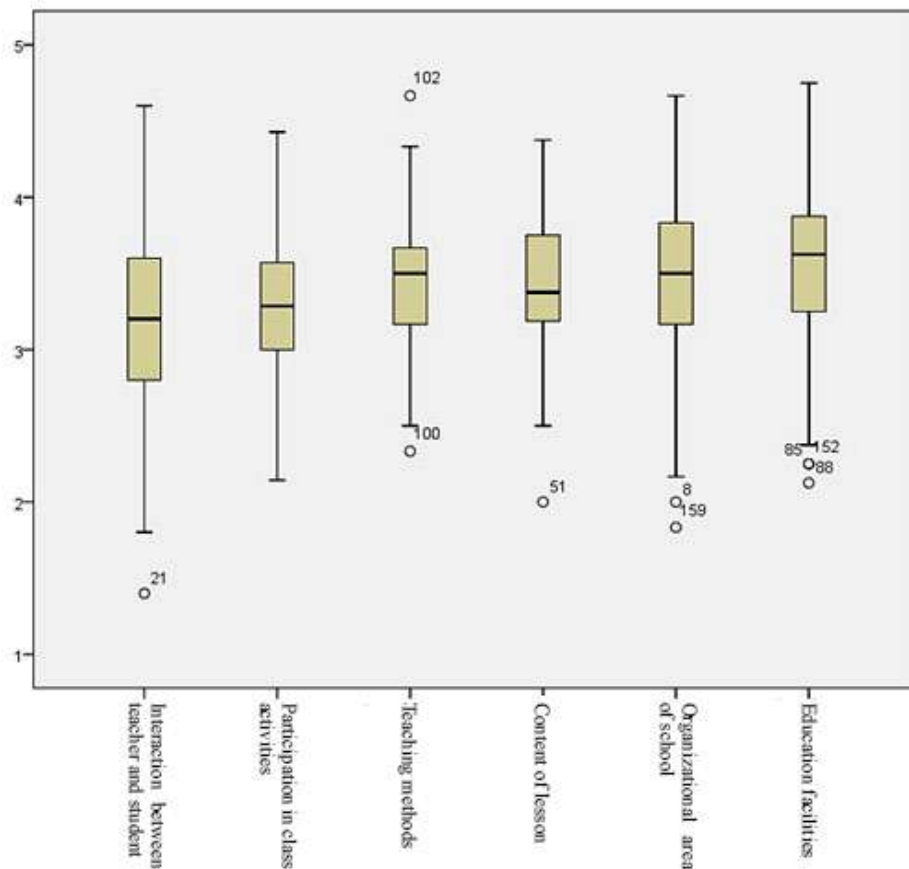


Figure 2: Box diagram for variables

Table below indicates descriptive statistics of observations, mean, standard deviation, variance of variables.

Table 1: Study to what extent different factors affect students’ happiness

factors affecting students’ happiness	N	Mean		Std. Deviation	Variance
		Statistic	Std. Error		
Interaction between teacher and student	179	3.1866	0.04421	0.59155	0.350
Participation in class activities	179	3.2985	0.03576	0.47845	0.229
Teaching methods	179	3.4497	0.03327	0.44513	0.198
Content of lesson	179	3.4476	0.03210	0.42951	0.184
Organizational area of school	179	3.4749	0.04224	0.56518	0.319
Education facilities	179	3.5475	0.03722	0.49790	0.248
Number	179				

According to table above, it can observe that mean of responses for variable “Education facilities” is greater than other variables, and then variables in order of Organizational area of school, Teaching methods, Content of lesson, Participation in class activities, and Interaction between teacher and student have the greatest mean. As variables used in this study are the measures repeated by a person, so are intertwined with each other. Hence, in addition to Wilcoxon signed-rank test, Friedman test has been also used to reply this question “whether six variables affect similarly students’ happiness or not; the results of this test have been proposed in tables below:

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Table 2: Mean of ranks in Friedman test

Hypotheses	Mean of ranks
Interaction between teacher and student	2.86
Participation in class activities	3.18
Teaching methods	3.63
Content of lesson	3.58
Organizational area of school	3.79
Education facilities	3.96

Table 3: Result of Friedman test

N	179
Chi-Square	42.902
df	5
Asymp. Sig.	0.000

As observed, the value of probability calculated in the last row indicates that there is a significant difference in effect of six hypotheses in this study, and all these hypotheses will not affect students’ happiness similarly. To perceive which variable has the highest effect and which has the least effect, it is better to take the table of ranks mean into account. According to this table, mean of ranks for variable “Education facilities” is greater than other variables, and mean of ranks for variable “Interaction between teacher and student” is less than other variables. Hence, the results based on descriptive statistics of variables found with confirming statistical tests, where it can say “Education facilities” and “Interaction between teacher and student” have the highest and least effect on students’ happiness. Further, among the questions associated to variable “Education facilities”, question 38 that are the factor “build and develop open space in school” has the highest effect on students’ happiness. To perceive what stated, the diagram below which indicates mean of questions about variable “Education facilities” together with confidence level (95%) has been proposed.

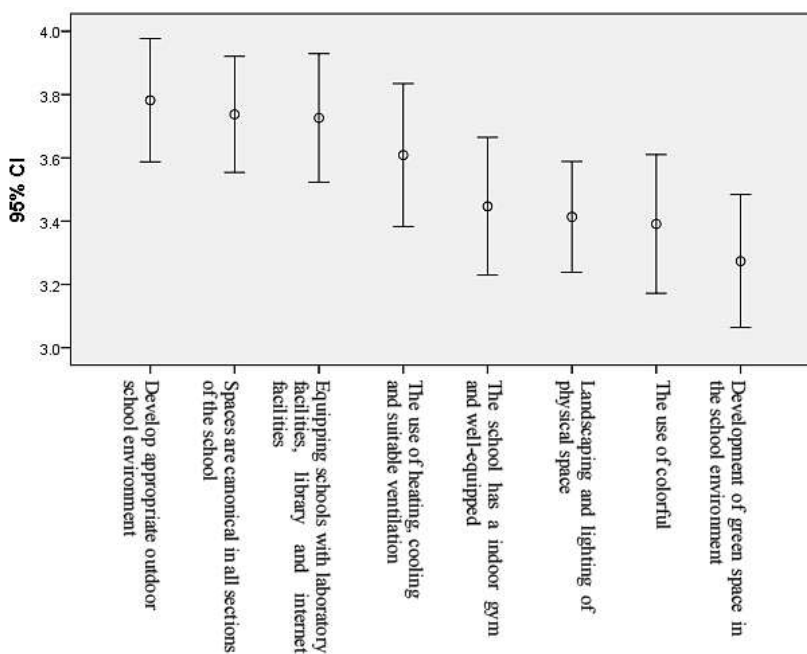


Figure 3: Mean of questions on variable “Education facilities”

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As observed, mean and confidence level for question “developing green spaces within schools” is greater than other indicators. Hence, it can say developing green spaces within schools has the highest effect on students’ happiness in viewpoint of respondents.

CONCLUSION

Human strives to achieve his needs through interacting with environment and change capabilities within environment. According to important role of open spaces within school to meet necessary infrastructure for development of students and weaknesses in current approach of designing open spaces, necessity to adjust criteria and principles for designing such spaces is clear. In education status, in addition to skills of reading, calculating, writing, new needs in form of acquiring the skill for living, problem resolving and how to face challenges, have been proposed, whereby any relationship without movement and dynamism will fail.

Living happy for child is important to the extent that good food, loving and protection are important to him, because living happy provides mental and physical health. Happiness in school leads to development in student’s physical, cognitive, emotional, moral and spiritual dimensions; and if a damage to one of these dimensions seen, or to be neglected, the student will not achieve his abilities and competences.

Hence, proposing do’s and don’ts in designing school environment given the existing limitations and facilities to modify improper approaches and move towards optimal approach to make happy environment are all main achievement in this study. In schools in contemporary age, open space can be the reason for dynamism and movement, making school to a collective place. Developing schools requires participation and hesitation. In viewpoint of scholars, alien to nature leads to increasing inattention to students and increasing stress in them. According to results, in viewpoint of education personnel and girl students, education facilities centered at designing open spaces within schools have the most effect on making happy environment at schools. Hence, proposing do’s and don’ts in designing school environment given the existing limitations and facilities to modify improper approaches and move towards optimal approach to make happy environment are all main achievement in this study.

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