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21 - 24 JUNE 2012

SUSTAINABLE LANDSCAPE PLANNING AND SAFE ENVIRONMENT

ISTANBUL TECHNICAL UNIVERSITY

PROCEEDINGS

B.EN.A Balkan Environmenal Association
Istanbul Technical University, Department of Landscape Architecture

BENA 2012 ISTANBUL CONFERENCE
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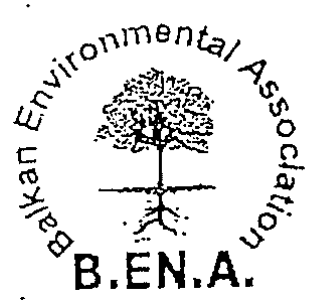
Istanbul 2012
Taşkışla

SESSION 5 - ENVIRONMENTAL EDUCATION AND PUBLIC AWARENESS

SESSION 6 - SUSTAINABLE DEVELOPMENT



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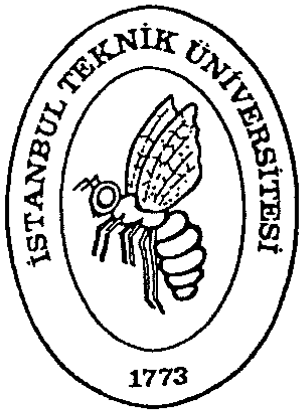

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PRIMARY ACTOR IN THE DESIGN AND TRANSFORMATION OF PRIMARY SCHOOLYARDS: STUDENT

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Keywords: *Schoolyards, student, primary schools, Bartın, child participation, participation strategies*

Abstract

School and the opportunities that schools provide are among the leading factors that shape child development first and social structure secondly. Within this framework, schoolyards emerge as a learning and experience environment, with a growing importance. Schoolyards, where students spend 28% of their daily school lives, should be used more efficiently and playtime activities in this environment should be assessed as an inseparable part of learning and development process.

In accordance with this perspective, serious studies are done in the issue, especially in countries where social and economic level of development is high; and these studies are put into practice as well. It is stated in best practices that expert opinions are not enough alone in the arrangement or transformation of schoolyards, which are important locations in learning process, and that it is essential to provide the participation of primary and secondary partners/actors in order to reach the objectives in practice and use. Students, who are one of the above mentioned partners, have a key role since they are the target audience of the study.

There are different phases during the participation of students, the key actors in the arrangement and transformations process of schoolyards, to the process. Among these phases, identifying the requirements and demands of students from schoolyards, is one of the important first steps. Thus, it is possible to define what kind of initiatives should be taken at different spatial units and hence, to identify what kind of design sense and materials are needed. However, in our country, it is seen that the necessary improvement and common attitude change cannot be ensured. In addition, it is seen that most of the schoolyards do not have playing, moving and recreational areas for students to feel relaxed, to have experience, to improve their communication and to have different movement experiences.

This study is done within the scope of providing student participation in determining the existing condition and designing transformation of schoolyards. Student opinions and expectations are identified through questionnaires made in 15 primary schools (13 public schools and 2 private schools) in Bartın Municipality and their contribution is provided to the arrangement/transformation process. The impact and significance of schoolyards as well as the findings and questionnaire results are covered in the paper.

Introduction

Landscaping is generally done by adults and for adults. Children, on the other hand, have to be satisfied with the environment provided for them (Spencer and Blades, 2006). However, adults should listen to the opinions of children and recognize them (Hart, 1992; Iltus and Hart, 1995; Malone and Tranter, 2003). It is ideal to include children in the decision process of landscaping (Francis and Lorenzo, 2002; Hauser, 2002; Melzer, 2001; van der Hoek, 2009). It will provide a more sustainable landscape management when adults change their habits and organize landscape planning by considering the needs and preferences of children.

Developments regarding the participation of children in landscaping is on the increase worldwide as well as the approaches. In many researches done by such resarchers as, Canaris 1995, Desmond et al. 2004, Klemmer et al. 2005, Smith and Aldous 1994; Waliczek et al. 2001, Wertsch 1985 regarding the use of schoolyards where they spent a large part of their daily life recently, it is found that there is an increase in opportunities provided for students to take part in schoolyard work and learn. In addition, these studies showed that as children participation have positive results in schoolyard transformation planning and design, implementation of design processes and utilization of landscape, their contribution value is of great importance (Francis and Lorenzo, 2002; Hart, 1992; Hart, 1997; Hauser, 2002; Lucas, 1995; Malone ve Tranter, 2003; Melzer, 2001; Stine, 1997; Titman, 1994; van der Hoek, 2009). Arguments stating that empirical studies and methods supporting theoretical developments are better (Hart, 1997; Johnson, 2000; Moore,1989) showed the value of children's participation. And the key to the success of participant planning and de-

sign process is the creative process between children and different groups (Marcus and Francis, 1998).

The transformation work of the schoolyard is directly proportional with its success for meeting the wished and expectations of the students (Özdemir, 2011). Therefore, active participation of students plays an important role (Francis and Lorenzo, 2002; Hauser, 2002; Melzer, 2001; Özdemir and Yılmaz, 2008; Scharf et. al., 2008).

When various advantages of schoolyards and the time and finance allocated to the transformation process of these grounds is taken into consideration, providing participation of children in the planning, design and implementation phases is significant in order to discover the most effective ways of these phases (Lekies et. al., 2007).

When the schoolyards, an important part of the schools are evaluated, it is seen that most schoolyards look distant and monotonous and that most of them are of concrete or asphalt (Anonymuous, 2005; Hauser, 2002; Hoff et al., 2007; Melzer, 2001; Natus, 2008). According to Schweizer (1999) schoolyards provide opportunities neither to support movement for children's right nor to relaxition and experience nature (Anonymuous, 2005). The abscence of active and creative play grounds result in such things as underdeveloped imagination, stress, not being able to find recreational activities and agressiveness (Scharf et al., 2008). Sitting on the desk for long during the classes and inadequate physical activity cause such problems as weakness, coordination problems and other health problems (Breul, 2005).

Playtimes are the periods for concentration after the inactiveness during the classes and for mental relaxation. The use of schoolyards that are in accordance with children's rights and that have environments for pedegogical (experience) and ecological (natural) play, movement, resting and living spaces (Fjørtoft and Sageie, 2000; Herrington and Studtmann, 1998; Hoff et al., 2007; Marcus and Francis, 1998; Melzer, 2001; Natus, 2008; Pickard, 2002; Schemm and Streicher, 2006; Wachs, 1989) effectively by the students during the playtimes;

- support learning capacity (power) of the student (Bensien et al., 2004; Hauser, 2002; Hoff et al., 2007; Malone and Tranter, 2003; Natus, 2008),
- reinforce learning motivation (Fjørtoft, 2004; Fjørtoft and Sageie, 2000; Hoff et al., 2007; Moore and Wong, 1997; Natus, 2008; Schemm and Streicher, 2006),
- support student to feel at ease (Bensien et al., 2004; Hoff et al., 2007; Lorenz, 2005; Natus, 2008; Melzer, 2001, Schemm and Streicher, 2006),
- support student's perception and motor skills and coordination (Barbour, 1999; Bensien et al., 2004; Fjørtoft, 2001; Fjørtoft, 2004; Fjørtoft and Sageie, 2000; Grahn et al., 1997; Hoff et al., 2007; Lorenz, 2005; Natus, 2008; Schemm and Streicher, 2006),

• reinforce more active and participatory social behaviors (Bensien et al., 2004; Fjørtoft and Sageie, 2000; Herrington and Studtmann, 1998; Malone and Tranter, 2003; Natus, 2008; Schemm and Streicher, 2006; Titman, 1994),
• contribute mental and intellectual development (Anonymuous, 2005; Lorenz, 2005; Schemm and Streicher, 2006; Tai et al., 2006),
• support healthy development of children by reducing agressive behaviors towards people and objects (Breul, 2005; Hauser, 2002; Hoff et al., 2007; Melzer, 2001; Scharf et al., 2008; Schemm and Streicher, 2006; Tai et al., 2006),
• provide opportunity for children to experience taking responsibility, making their own decisions or consensus decision-making, discovering unknown or learning the new by enabling social experience (Bensien et al., 2004; Lorenz, 2005; Hoff et al., 2007; Moore and Wong, 1997),
• provide an opportunity for revealing their organizational skills by making a common activity, developing their self-confidence and improving their sense of responsibility and ability of expressing themselves (Bensien et al., 2004; Hauser, 2002; Moore ve Wong, 1997; Titman, 1994),
• provide opportunity for different activity experiences (Bensien et al., 2004; Hoff et al., 2007; Lorenz, 2005; Melzer, 2001; Natus, 2008; Schemm and Streicher, 2006),
• provide an opportunity and contribute to mental and intellectual relaxation, withdrawal, relaxation and distraction (Bensien et al., 2004; Hoff et al., 2007; Natus, 2008; Schemm and Streicher, 2006; Zask et al., 2001),
• contribute to cognitive and physical development of children (Marcus and Francis, 1998; Sallis et al., 2001; Stone et al., 1998; Wechsler et al., 2000),
• contribute to growing environmentall-conscious, healthy and active individuals (Biddle et al., 1998; Lorenz, 2005; Natus, 2008; Zask et al., 2001),
• help children to develop their imagination and creativity in design and practice (Bensien et al., 2004; Fjørtoft and Sageie, 2000; Fjørtoft, 2004; Herrington and Studtmann, 1998; Lindholm, 1995; Malone and Tranter, 2003; Marcus and Francis, 1998; Moore and Wong, 1997; Titman 1994),
• provide opportunity for the observation of the change in the environment in an ecological surrounding (Özdemir, 2010).

Accordingly, this shows that below mentioned items should be considered:
• „Learning through experince" method should be used,
• urban children should not be directed to be a „user" but a „participant",
• children should lead a quality living,
• creating awareness in children,
• spaces should be turned into a part of the education,
• ensuring the participation of children in planning, organization and maintanence works,
• designing gardens for children where they shape and organize their own future,
• providing environment education for children to increase their sensitivity and background about nature (participating in studies in schoolyards organized in order to get to know nature),

• ensuring students' meeting with the nature,
• making studies to provide these trainings to continue through the whole primary education in order to get a sustainable result,
• ensuring the sustainability of the studies and protecting them,
• considering current requirements in landscape planning (Özdemir, 2010).

The aim of the current study is to turn children into a participant and determinant element in primary schoolyards/breakgardens in the light of the above mentioned scientific studies and developments and to emphasize the need for a change-transformation process. The study is carried out in the primary schoolyards in Bartın city center municipality border. In reaching the mentioned objective first students assessment of schoolyards is identified and suggestions are developed on the change and transformation of schoolyards.

Material and Method

The main material of this study is 15 primary school's students and their schoolyards in Bartın city center municipality border. Among these schools 13 of them were public school affiliated to the Ministry of Education and 2 of them were private schools affiliated to the Ministry of Education (Figure 1).

The data on the schoolyards of the primary schools in the city center of Bartın, which are identified as the materials of this study, are collected through the information from Provincial Directorate for National Education and school managements, from face-to-face interviews with students and teachers and thus, the schoolyards' are examined on site in terms of their structure and plant landscape design and the mentioned data is supported with photos and satellite images (Figure 1).

Statistical Package for the Social Scieces (SPSS 15.0) programme in electronic environment is used in evaluating the questionnaire forms to be used in the study.

In all schools in the scope of this study the population according to the 2011 data of Bartın Provincial Directorate for National Education is determined as 7.727 (total student number). Using Statcalc Programme the rate of method using is taken as 0,50; acceptable error level as 3 (0,03%); confidence interval as 95% and the sample size calculated with Statcalc programme is determined as 961. Since the questionnaire would be applied to an equal number of students from each school and each grade with random sampling methods, the sample size is increased to 990.

In the information form on the schoolyards there are questions and information on their personal information, how they find schoolyards in their existing form, whether they spent time in the schoolyards during the playtimes, whether there is enough green space in the schoolyards, if it is possible to use the schoolyards in adverse

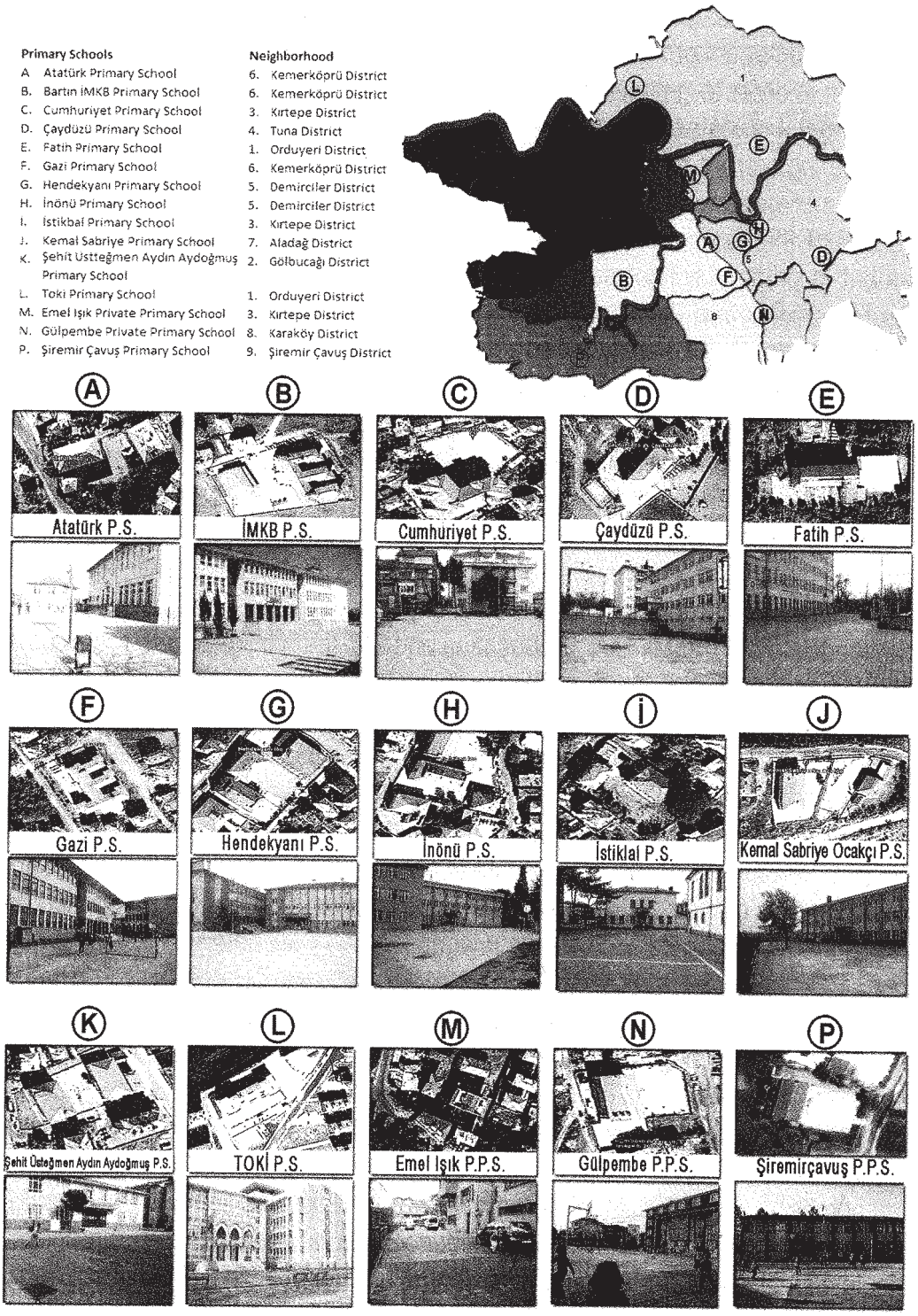

Figure 1.
Primary Schools and schoolyards in Bartın city center municipality border

weather conditions, whether there are fighting among students of the same age group or of different ages and genders, if they are willing their schoolyards to be re-organized and if they are willing to use the schoolyards (for spaces to bounce, stand in balance, creep together with slides, sandbox, table tennis, sitting and climbing spaces etc.).

The questionnaires are applied to a total number of 990 students in 15 schools in this study including all grades (preschool, 1st – 8th grade). Questionnaire form as data collection tool is implemented after it is approved first by Provincial Directorate of National Education assessment commission and then by provincial authority In accordance with the number of students in each school and at specified times and at places where school directors deemed appropriate (at classes, meeting rooms etc. in line with the number of students). Students were given the necessary explanations about the questionnaires and answered the questionnaire which included 20 questions to be replied in 15 minutes. As a result of the questionnaires 121 questionnaire forms were left out of assessment because some of the students did not reply the questions, some could not mark properly and the answers of preschool students were not included. Feedback was received from 869 students- 440 male students (50,6%) and 429 female students (49,4%).

The data obtained via the implementation of the questionnaire are identified and interpreted with frequency (n) and per cents (%).The whole study is realized in electronic environment and the data obtained as a result of the questionnaire is transferred to 18.0 version of the SPSS programme and analyzed. The number of students, their ages, demands and requirements are considered in the assessment.

Utilizing the information and findings of the study, suggestions on the process of change and transformation of schoolyards in Bartın city center municipality border with student participation are made in the last phase of the study.

Results

The questionnaire findings of the study carried out to reveal the student opinions regarding the appropriateness of schoolyards of primary schools, the spaces for children in Bartın city center municipality border, for outdoor activities and their rearrangement, are given below.

I like the current state of the schoolyard	I strongly agree %	I agree %	I am not sure %	I disagree %	I strongly disagree %	No answer %
Male	14,50	20,00	20,00	20,70	24,30	0,50
Female	10,30	15,90	25,40	28,90	18,60	0,90
Total	**12,40**	**18,00**	**22,70**	**24,70**	**21,50**	**0,70**

Table 1.
Students' answers to "I like the current state of the schoolyard" statement

30,40% of the students stated that they were glad with the existing schoolyards while 46,20% expressed that they were not.22,70% of the students, however, stated that they were undecided (Table 1).

		I strongly agree %	I agree %	I am not sure %	I disagree %	I strongly disagree %	No answer %
I like going out to the garden in the breaks	Male	39,30	35,50	10,00	8,20	5,90	1,10
	Female	29,80	40,60	15,40	7,70	5,10	1,40
	Total	**34,60**	**38,00**	**12,70**	**7,90**	**5,50**	**1,30**
I can spend time alone in the schoolyard	Male	11,60	23,20	15,70	24,40	23,50	1,60
	Female	6,50	21,40	15,90	30,80	24,20	1,20
	Total	**9,10**	**22,40**	**15,80**	**27,50**	**23,80**	**1,40**
I spend time with my classmates in the schoolyard	Male	47,30	36,60	5,70	5,00	4,10	1,40
	Female	38,50	44,80	7,90	5,80	1,60	1,40
	Total	**42,90**	**40,60**	**6,80**	**5,40**	**2,90**	**1,40**
I am going out to the schoolyard to play with my friends	Male	34,30	32,50	14,80	11,60	5,70	1,10
	Female	23,30	36,60	11,70	20,00	6,50	1,90
	Total	**28,90**	**34,50**	**13,20**	**15,80**	**6,10**	**1,50**
I am going out to the schoolyard to have a chat with my friends	Male	16,40	29,50	21,40	19,80	12,00	0,70
	Female	15,90	28,90	23,30	23,10	7,00	1,90
	Total	**16,10**	**29,20**	**22,30**	**21,40**	**9,60**	**1,30**

Table 2.
Students' answers on the activities in schoolyards

72,61% of the students stated that they prefer to go out to the schoolyard during the playtimes while 13,46% stated that they do not prefer to go out in these breaks. This result reflects that students want to spend time in the schoolyards during the playtime breaks and reveals the importance of schoolyards. 83,50% of the students stated that they spent time with their friends in the schoolyard while 8,30% said that they did not spend time with their friends and 6,80% said that they were undecided. 63,40% of the students said they went out to the schoolyards to play with their friends while 21,90% said they did not go out to the schoolyards to play with their friends and 13,20% said they were undecided. 45,30% of the students stated they went out to the schoolyards to have a chat with their friends while 31% stated that they did not go out to the schoolyards to chat with their friends and 22,30% stated they they were undecided. 51,30% of the students stated that they did not prefer to spend time alone in the schoolyards (Table 2). This shows that students do not prefer to spend time alone at schoolyards. These answers reveal that schoolyards for primary school students are spaces for socialization and sharing.

		I strongly agree %	I agree %	I am not sure %	I disagree %	I strongly disagree %	No answer %
Is there enough sitting space at schoolyards?	Male	14,10	22,00	14,80	27,50	20,70	0,90
	Female	8,20	18,20	16,10	37,10	19,60	0,90
	Total	**11,20**	**20,10**	**15,40**	**32,20**	**20,10**	**0,90**
Are there play things in the schoolyard?	Male	7,00	8,60	8,60	26,80	48,60	0,20
	Female	5,60	7,70	8,40	34,60	42,10	1,60
	Total	**6,30**	**8,20**	**8,50**	**30,60**	**45,40**	**0,90**
Are there any places to spend time at the schoolyard in adverse weather conditions?	Male	8,00	8,60	9,80	28,40	44,80	0,50
	Female	5,40	6,30	9,80	31,90	45,70	0,90
	Total	**6,70**	**7,50**	**9,80**	**30,10**	**45,20**	**0,70**

Table 3.
The breakdown of questions regarding the use of schoolyards in different weather conditions and whether the schoolyards meet students' expectations

52,36% of the students stated that there was not enough sitting space in the schoolyards. 76,04% of the students answered the question asking whether there was a play thing in the schoolyard with "I disagree" and "I totally disagree" which showed that there was no play things in the schoolyards. 75,30% of the students expressed that there was not available space to spend time in the schoolyard in adverse weather

conditions while 14,20% of them said they have such spaces. 9,80% of the students, on the other hand, stated that they were undecided (Table 3). In addition, it is seen that 43,18% of the students said there should be more green spaces in schoolyards.

		I strongly agree %	I agree %	I am not sure %	I disagree %	I strongly disagree %	No answer %
Are there any fights between students who play in the schoolyard and who do not?	Male	15,00	25,20	24,10	18,60	15,50	1,60
	Female	13,80	20,50	31,20	19,80	13,30	1,40
	Total	**14,40**	**22,90**	**27,60**	**19,20**	**14,40**	**1,50**
Are there any fights in the schoolyards between students who are younger and who are older?	Male	16,80	26,40	24,10	19,80	12,30	0,70
	Female	14,90	29,60	28,20	14,90	11,40	0,90
	Total	**15,90**	**28,00**	**26,10**	**17,40**	**11,90**	**0,80**
Are there any fights between girls and boys in the schoolyards?	Male	18,60	22,30	24,80	16,10	16,80	1,40
	Female	16,80	24,50	29,70	15,40	11,20	2,30
	Total	**17,70**	**23,40**	**27,20**	**15,80**	**14,10**	**1,80**

Table 4.
Student answers on whether there are fights among students with regards to activity, gender and age

Primary schoolyards are used by all students at 7-14 age range (children and youths). Accordingly, students stated that there are fights between students of different gender and of different ages as well as among those who play and who do not. The students who supported this statement make up 39,52% while 32,12% of them stated that there was no such fights (Table 4).

An average of 64% of the students stated that certainly there should be such things as hiding places; green spaces to lie down or sit; sitting spaces; football goalpost; basketball hoop; swing; feel phad and touch screen, green open space classroom (amphi theatre); climbing hills; pergola, flower parterres; trees and bushes; water-pumps; small lake; sand box; tree house; table tennis; slides; ground games (hop-scotch, chess etc.); balance blocks and rocks; tunnels to creep and climbing tools / climbing wall to meet such needs as social learning (communication, experience etc.) motion (running, jumping, climbing, creeping etc.) and relaxation; while 21,80% of them stated that they agree to have such places. This result of the study indicates that a "break garden" including playing, moving and relaxing spaces for different activities should be provided.

I support the reorganization of the schoolyard	I strongly agree	I agree	I am not sure	I disagree	I strongly disagree	No answer
Male	66,60	16,60	9,80	3,60	3,00	0,50
Female	63,90	19,10	7,90	2,30	5,10	1,60
Total	**65,20**	**17,80**	**8,90**	**3,00**	**4,00**	**1,00**

Table 5.
Students' answers on reorganization of schoolyards

85,27% of the students stated that a schoolyard where they feel good and relaxed is important for them. 83,00% of the students expressed that they want their schoolyards to be reorganized while 7% stated that they do not want and 8,9% said they were undecided (Table 5). This result of the study reveals that a schoolyard where students feel comfortable and good is important and that schoolyards should be reorganized.

Although 43% of the students (Table 1) find the schoolyard good and very good, 85,80%, a high rate of students, were positive about the changes that are offered and that they wanted the whole changes to be realized at a rate of 83,0% (Table 5).

In the light of the data obtained via linear survey in the schoolyards of 15 schools in the City Center of Bartın, it is determined that in terms of landscape planning, the schoolyards do not allow students to do such activities as social learning (communication, experience etc.), movements (running, jumping, climbing, creeping etc.) and relaxation (relaxing, sitting, lieing etc.); and that the schoolyards are mostly similar. In the schools examined, it is observed that the front schoolyards are available to be used by the students and they are mostly used for ceremonies. Football goalposts or basketball hoops are also located in these front grounds. Back gardens, on the other hand, are inadequately arranged and not used by the students. Sometimes the students are even not allowed to use these back gardens. The front gardens are not divided into seperate parts and have hard surfaces. These grounds are mostly used by male students for playing football and basketball and by other students for various activities (running, chatting etc.). Above mentioned ground is used by students of different age groups which in turn causes students' to hurt one another and increases the risk of accidents. In addition, these grounds do not provide the opportunity to rest before the courses and thus, attend the courses in a relaxed mood (Özdemir, 2011). When student opinions and demands are evaluated it is seen that most of the students want to spend their breaks in the schoolyards and this sets out the significance of schoolyards. It is seen that "break gardens" are required for all students according to their age, demand and habits.

Conclusion and Suggestions

When the primary schoolyards of the Bartın city center municipality border are assessed, it is seen that;

- the long period of they students spend in schoolyard,
- currect inactive situation of most of the schoolyards,
- inadequate guidelines for spaces for different usage areas of schoolyard,
- the inadequacy of the existing schoolyard,
- the relation between the design of the schoolyard and the accidents in the schoolyard,
- students behaviors during the breaks connected to inadequacy of materials and their area of utilization in the schoolyard,
- opinions and requirements of the students,

lead to the formation of opinions and suggestions to change schoolyards. Schoolyards, where students spend 28% of their school lives, should be used more effectively by the students and breaktime activites should be adressed as an indispensable part of the learning and development process.

Among the information objectives that will be leading in the process of change and transformation of schoolyards are;

• providing relaxation, movement and playing opportunities,
• mitigating unintended physical contact that occurs when students play,
• mitigating the intolerant behaviors of students among themselves by providing appropriate activites for children with different age, demand and expectations.

Such changes will not only mitigate the risk of accidents but also support students to develop respect and behaviors that will pave the way of playing together instead of competing, disputes and fights.

It is stated that expert opinions alone are not enough in the arrangement and transformation of schoolyards and that the participation of primary and secondary partners/ actors is important in reaching the objectives in practice. Students are among the mentioned partners and thus, as the target group of the study they have a key role. The aim is to make student visible in all elements of social life. In this scope, such building blocks as providing the participation of students in decision making processes of living spaces, searching the living conditions of students in their school lives and taking measures to improve these conditions, forming children's rights strategy for schools and ensuring the visibility of children in budgets should be formed. Hereby, the process of creating awareness and human rights culture at schools will form a strong basis for improving these areas and creating children-friendly spaces. In order for students to use their participation rights, they have to understand what is participation, what it is about and for what as well as their roles in this process. Although students stated in the first question that they were glad with their schoolyards, in the following questions it is seen that they are willing for changes. Therefore, it is necessary to acquaint students with the subject itself. Informing students, listening to them and valuing their opinions, assessing them as an equal and active partner, individual and member is an important phase in the change and transformation phase of the schoolyards.

There are different phases in the participation of students, as a key actors in the arrangement or transformation of the schoolyards, to the process. One of the first and important steps is identifying the requirements and demands of students in a schoolyard. This will pave the way for identifying what kind of initiative should be taken in different spaces and therefore, identifying what kind of design understanding and material is needed.

The aim in the arrangement of schoolyards, which will be learning and experiencing spaces, is:

• to include students in planning, design, implementation and maintanence processes,
• to arrange the land and form different utilization zones,
• to forms planning, design, implementation and maintenance processes in line with ecological criteria,
• to provide convertibility (providing opportunites for next generation students to have spaces for creative Works).

The aim of participation is:

• to provide student participation in the design of the change process of schoolyards (practice sample; democracy learning) and thus to pave the way for positive change-transformation environment that occurs as a result of this process,
• to provide the creation of opinions on the changebility of existing play opportunities in accordance with the needs of the students,
• providing the participation of students, teachers and parents in small arrangement works and thus, strengthening the feeling of appropriateness,
• to ensure the understanding of the relationship between social learning, democratic learning and decision making process (learning to understand) and to ensure the comprehension of operation processes,
• to build up self-confidence in students towards arranging their own playgrounds and living spaces.

The advantages of participation approach is:

• creating awareness in students on planning, the quality of decision and efficiency,
• mitigating conflicts in societies and increasing the quality of life,
• forming dynamism in social life,
• preparing the child for adult life in social areas,
• child-friendly approaches are important factors and participation of children has economic results.

Providing the adequacy and continuity of services for children is only possible via defining existing legal arrangements with a new children-centered approach, filing the legal gaps and giving responsibility to both government and non-governmental organizations on protecting children's rights.

Increasing the awareness of students, teachers, parents as well as school managements and consequently central and local authorities about the risks that might arise from the school environment is an important step in developing an awareness of formation of a safe society.

In this context, "children-centered" approach stands out. Children-centered approach meet the requirements of children resulting from individual differences and helps them to use their potential at its highest level.

Children-friendly schoolyard change initiative will reinforce the hopes for students to use their participation rights - and thus all their other rights - more erffectively in the future. Children-friendly approaches will also bring such results as;

- sustainable landscape design,
- developing of modern communication policies,
- increasing the opportunities for children participation and expanding the borders,
- launching a dynamic and participatory working process,
- making changes in laws and regulations and in organizational structure.

In order to provide the audit for increasing children participation in the design process in the future, it is necessary to;

- make planning in which children are the consultants in the design process,
- understand the level of knowledge, values and needs of the children and and transfer them to the practices,
- utilize facilitators as design process guides (experts, moderators),
- use age-appropriate methods,
- develop effective, creative and enjoyable methods,
- spare time for efficient work process and implement time management,
- know that everyone has a right to speak,
- ensure that children opinion is reflected in design results,
- form participation and reflection culture (Rayner et al.).

It is supported with the students' answers that all school in Bartın city center need an attractive "break garden" including spaces for playing, activities and relaxing ensuring feeling comfortable, experiencing, increasing the communication and different activities according to their age group, habits and demands. Although it is not possible to expand the schoolyards in their existing circumstances, it is suggested to make some structural and vegetal landscape arrangements with a student- participation approach and thus evaluate the change and transformation process, which will meet such needs of the students as social learning (communication, experience etc.), activities (running, jumping, climbing, creeping etc.) and relaxation (relaxing, sitting, lieing etc.), in the scope of participant-based planning process given in Figure 2.

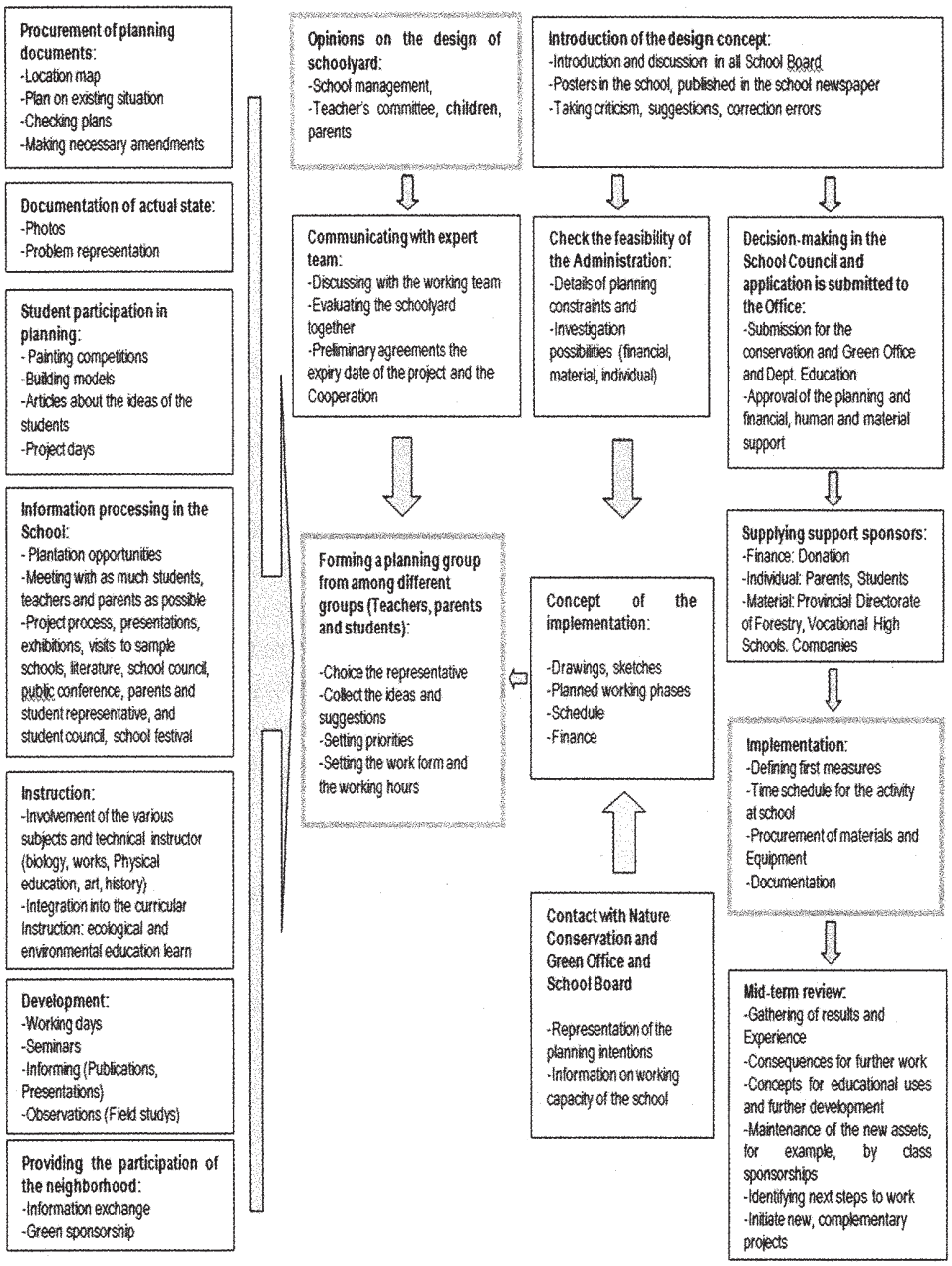

Figure 2.
Participant based planning process for change and transformation of schoolyards (Anonymuous)

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