Teachers' Interpretation of "Learning through Landscapes" in Egyptian School Grounds

Noha Osama Mohammed Fikry

Prof. Dr. Sherif ElFiki

Department of Architecture, Faculty of Engineering, Arab Academy for Science, Technology & Maritime Transport.

Abstract

Away from the typical indoor classroom "Industrial assembly-line" model, many countries started to adopt 'Learning through landscapes' LTL that promotes students' engagement with nature. This primarily takes place in school grounds. The present research investigates teachers' insights on how the design of playgrounds in Egyptian public schools may accommodate the requirements of LTL. It employs qualitative analyses to semi-structured interviews interviews that involved 23 teachers.

The study concluded to the main school-ground features in support to LTL goals. These included: Improved Attainment, Interaction with Nature and Biodiversity, Physical and Mental Health, Psychological Wellbeing, and Social Relationships. This paper will only highlight glimpses of the 'improved attainment' findings and its sub-categories, i.e. Productivity, Creativity, Creative educational methods, Understanding and Play Learning. The findings are discussed in the light of relevant literature, together with teachers' recommendations for the development of school ground design to cater for LTL objectives more effectively.

Keywords— Learning through Landscapes, School Grounds, Education, Egypt.

Introduction

School grounds are traditionally used for children play. However, they also set an effective medium for them to learn and explore the natural settings while playing. Regardless of their size, design or conditions, playgrounds need to be designed in a way that facilitates the educational process. The Council for Learning outside the classroom confirmed that every child should have the opportunity to experience life and lessons beyond the classroom walls, to expand their horizon, and to introduce them heritage, culture, adventure to art, and the natural world.

Therefore, school grounds need to give access to the life changing experiences and to facilitate children's attainment and aspirations (CLOC, 2018)

Conducive landscapes assist the learning process by providing spaces for leisure, interacting with natural components, and providing outdoor lessons and revisions (Ali et. al., 2015). This gives students the chance of mixing their academic education with real life experiences, providing a wide range educational benefit for the Egyptian public schools, taking into consideration the school environment as a cornerstone of the educational process.

However, a little attention is given to this specific topic and its importance in the Egyptian context, and so, a study on the status of the Egyptian school grounds is needed to be enhanced.

This paper comes in two major parts. The first part briefly explains the objectives of 'Learning through Landscapes'. This is meant to pave the way to the subsequent qualitative analyses of the semi-structured interviews held with 23 public school teachers in Egypt.

"Learning through landscapes" LTL

"Learning through Landscapes" started as a three-year project in UK to investigate the usage, design, development and management of school grounds in primary and secondary schools. It has many objectives related to children's needs and connection with the natural environment, to help them become more active, more engaged in the learning process, and to develop their social skills (LTL, 2008).

LTL had six main objectives, which are briefly introduced in the following

Learning and Attainment

Being the first aim of education in general, and of LTL in specific, it is important that school grounds become more meaningfully embedded in the teachers' and pupils' everyday practice, to play a positive role in the learning process. This usually happens when the grounds are connected to children and become an adequate environment with children and their needs. Related studies confirmed that similar settings can contribute significantly to improved attainment and learning experience (Titman, 1994; Atmodiwirjo, 2013).

Nature and Biodiversity

Children in general have special attachment to natural environment that appeal to them due to their diversity and their feeling of timelessness. Children's access to nature provides a pillar aspect for sound growing up physiologically, psychologically and mentally (White & Stoecklin 1998; Wells, 2000; Malone & Tranter, 2003).

Social Interaction

School grounds have a potential positive effect on student's social skills and creative development in general. Also, there are different relationships outside the classrooms, teachers seem more friendly, students' interaction gets less formal and lessons become more interesting (Miller, et.al, 2009).

Health and Wellbeing

There is a direct link between the usage of outdoors and green areas that promote human health. Exposure to natural spaces is better for physical, behavior and mental abilities (Miller el. al., 2005, Munoz, 2009). So, policy makers started to find a way to support the usage of outdoors as a means for improving public health. This helps in solving many health challenges that face the communities nowadays (Munoz, 2009).

Risk in Play

LTL concluded that properly-designed spaces are very effective for children's confidence in taking risks and meeting challenges, and this is very healthy for their growth (LTL, 2008).

Engagement in Community Development

Learning through landscapes helps children to make a valuable contribution to their wider society, this usually happens when we give children real-life opportunities to do so (CLOC, 2008).

Methodology

The study depended on the in-depth qualitative analyses of semi-structured interviews in the fall semester of 2018, with duration ranged from 15 minutes to about 45 minutes maximum. These interviews were conducted with 23 teachers (11 males, 12 females) of different subjects, including Biology, Geology, Physics, Math's, Social studies, Mechanics etc., their ages ranged between 25 and 62. The teachers are only mentioned with their initials for the privacy and confidentially of their information. The adopted 'purposive sampling' was meant to select participants on the basis of their exposure and experience with the subject, as well as their potential to generate the sought-after information. This aimed to assess the possible utilization of school ground environment towards LTL objectives.

Based on their experience, teachers were asked to describe the learning activities that can take place in a school ground, together with the ideas they might have in mind to be conducted, and their reasons of its importance. Each teacher mentioned the school subjects to which the activities are relevant, their learning objectives and the physical elements in the school ground that they needed. The data obtained was then analyzed to understand the extent to which the physical environment of school grounds can promote LTL.

The first step towards the analyses was transcribing the audio recorded interviews with the important taken notes within, and then highlighting the main keywords. These keywords were then grouped under five main categories: Improved Attainment, Interaction with Nature and Biodiversity, Physical and Mental Health, Psychological Wellbeing, and Social Relationships. All these categories were examined regarding playground abilities to fulfil the goals of LTL. The following section discusses only one category, namely the "Improved Attainment".

Improved Attainment

Under the title of "Improved Attainment", teachers referred to five related themes as: Productivity, Creativity, Creative Educational Methods, Understanding, and Play Learning.

Productivity

Starting with "Productivity", many teachers mentioned that outdoor learning facilitates the educational process without much effort from them; it raises the educational standards, keeping students busy and quiet doing their assigned tasks. It also helps in raising the national income; as students understand things much better using their own hands and doing products themselves.

This allows them to understand the curriculum more and never forget it, also this would help much in enriching the student's productivity, effectiveness and concentration.

This was supported by a 35 years old female English teacher who mentioned that the integration of the lesson content with the outdoor environment is a source of happiness for the students "Students are happy, energetic and this increases their capability of learning. Being outdoors breaks their routine by changing the class setup and decreases the required tasks, and so, the results of the quizzes are much better in the fresh air." A 40 years old male Mechanics teacher also stated that students learn better when being outdoors; they got enthusiastic, never forget the lessons, become eager and excited to learn more, and this for sure increases their academic performance. Therefore, being outdoors allows students for beneficial changes which are healthy and helpful for their mental assimilation.

This was similar to what the institution of learning and teaching in Scotland mentioned saying that the outdoor areas in general are the unique learning and developing environments for children; they provide and support children with developmental and learning opportunities. Outdoor learning might contribute to the government strategic objective towards "Creating a more successful country" (LTS, 2010). It is also observed by Foster et al. that children's learning can mainly be enhanced outside; outdoor lessons are more relaxing, interesting and easier to understand (Foster et al., 2006).

In inspiring "productive learning", plants play important role. Teachers suggested choosing the perfect timing to plant different plantations in the school gardens together with the students. These plants will be used for academic issues not only aesthetic purposes and so, this would then be exploited in the student's projects, helping them to learn more.

This was supported by a 30 years old male social studies teacher who talked about the benefit of having plants in the playground mentioning the need for having certain places in the playground for agriculture. He stated that this can help much studying climate, nature of plants, moreover, can be used as fertilizer for the soil afterwards.

Teachers also mentioned that planting for learning purposes is like doing real life applications; as cultivating, seeing and dealing with the plants assists much in raising productive students. Students learn much about each kind of plant and their classification according to their shapes and functions, this is much easier outside.

This was supported by a 27 years old female Biology teacher who mentioned that "In Ismailia, I used to have most of my classes outside; this is very helpful in studying the morphology and the classification of the plants. The garden there has many kinds of plants needed for the students to study and so, they have the chance to classify them according to their shapes and their functions"

The benefits of cultivating plants not only count in the biology classes, but also after agriculture, students use these plants in the classes of art, and this process only needs to allocate a specific place in the playground for drawing. The teachers noticed that drawing live helps much in the quality of the student's drawings; students do this very well and in a proper way. This was supported by a 38 years old male Art teacher who supported this notion saying that when he asked his students to draw a natural element (Plants, butterflies, etc.) and draw it, the results of the drawings of his students were surprisingly amazing.

Creativity

Talking about "Creativity", many related consequences happen when learning outdoors. The curriculum is exploratory, and so, students would be given a great opportunity to feel completely free to explore everything around them, things become very different; they visualize subjects and recognize it in its real natural form. This increases their intelligence, discovery and innovation rate, enhance the quality of their education, stimulating their curiosity and creativity.

This was similar to what Kalburan mentioned that being outdoor is the best place to promote and enhance children's creativity, skills and self-determination, decision making and organization skills, that is most likely to develop during outdoor activities (Kalburan, 2014).

The 35 years old female English teacher mentioned the reason behind the necessity of having different educational strategies and improving Teaching and Learning techniques saying "Kids learn how to think outside the box, they stop being bookish and this improves the independent structural character of the educator."

This was also supported by a 30 years old male social studies teacher who mentioned that when the school and its education method are different, students become very creative dealing with the exploratory curriculum, and so they can do this anywhere in the playground as long as teachers are committed to the learning outcomes.

The 27 years old female Biology teacher together with some students mentioned that the feeding process of learning is not suitable anymore especially for senior students; this will force them to grow being followers not leaders, always waiting for someone to teach them the correct information, so they won't survive their life easily. It is also mentioned that this would make a great addition to the teachers to change in the curriculum exposing the students to different thinking strategies and scopes that increases their mental health. As a result, this will make them be fully committed to the learning process, adding suspense to the educational atmosphere.

A 33 years old female Psychologist encourages the process of learning outdoors from the psychological effect. This process adds creativity and positive learning

attitudes to both the students and the curriculum. It also helps in breaking moulds and the educational ordinary habits, increasing students' self learning and exploration.

A 29 years old female Science teacher mentioned that the opportunities of teaching outdoors can be summarized in having large areas to move between. This helps in having different open minded ways of thinking than being in the classroom, exploring the items used everywhere in the learning process and doing different activities, which help increasing student's level of creativity even in playing and increasing their critical thinking. She also added that if students have the chance of seeing natural things and do some effort in exploring such things with their hands, they will never forgot it (Handling skills will be acquired as they will use their hands on a higher level) rather than just studying them as figures and texts in books.

This was similar to what Kingston et al mentioned that some schools contain natural and wild gardens that provide a habitat for urban wildlife. This offers a perfect setting for science lessons. Gardening and nutrition vegetables give students an ideal opportunity for hands-on learning. As an example, children learn much about nutrition in the learning landscape gardens by growing variety of high nutrition fruits and vegetables (Kingston, et.al, 2007).

A 36 years old male Maths teacher and a 32 years old male Geology teacher agreed and appreciated this process naming it the "Touch learning". Dhanapal in 2013 also defined the Outdoor learning experiences as an experiential process of learning by performing acts or experiences that take place out of the classrooms setting or outdoor exposure. It usually allows for more sensory learning experiences (Observations, seeing, feeling and hearing) (Dhanapal, 2013).

Talking about the relation between art and creativity, a 45 years old female Art teacher stated that she believes being outside is the only reason that makes her students creative and productive in a different way; outside they can see the reflection of the natural light on the objects and draw them properly, this allows the students to make a clear vision of the light preventing the confusion that may happen indoors. She is surprised denying the fact that a creative artist can be promoted in a narrow space saying that "Artists as Leonardo Di Vinchi used to paint all his paintings outdoors, this gave him flexibility and freedom more than anything else." She then added that every person should have at least 1 m2 personal space surrounding him, this space is very important for his freedom, comfort and creativity, changing his mindset and developing his strategy of thinking. Being too adjacent to each other and decreasing the spacing between the students usually leads to talent suffocation.

Creative Educational Methods

Mentioning the "Creative educational methods", learning outdoors helps much in melting the educational process routine, making a difference in facilitating teaching, learning process, introducing outdoor designed games, and don't deal with the teacher as the only source for information and this helps encouraging students to learn different things. Moreover, it facilitates much in increasing the integration between different subjects, succeeding in making applications in all subjects and adding much value to what is written in the books.

The 45 years old female Art teacher mentioned that the integration of all subjects together is one of the most important things to be done in schools she said "Art is of no need inside, outside students witness the projection of the light on the objects and the feelings of the different materials. I try to teach my students how to draw their needs of other subjects such as the biology, linking and fulfilling their needs"

This was similar to what Johnson and Mielcarek mentioned that the schoolyard habitat is considered an ideal setting for integrated learning, as nature has a direct tie to sciences and arts. It facilitates scientific experiments, Math exercises and inspires nature writing, also providing setting for storytelling or dance performance. And so, schoolyards have variety of curriculum objectives and if not used, it runs the risk of becoming neglected over time (Johnson & Mielcarek, 2007).

This was also supported by the 38 years old male Art teacher, who stated that only outside he can teach students how to draw perspective, where they spread in the playground respecting the horizon line and the point angles with all the drawn object's shade and shadow. This way student can easily imagine the proportions and the dimensions. Also, music teachers seek to help students' link music with their practical subjects.

Learning outdoors gives the students the ability to break the moulds and the ordinary educational habits. They have the chance to perform and see their experiments in a natural setting, sensing it instead of doing it in the laboratory. Also, it helps making real life applications which facilitates imagining the proportions and the dimensions. Students added that teaching with examples, variations of teaching methods and exposure with openness to different points of view increase the effectiveness of students' learning. This was supported by the 36 years old male math's teacher mentioned that some measurements would be very helpful and effective to be done outside "We can make some measurement using the similarity rules, for example: finding the height of some trees using these rules. It would be very helpful to have a specific place outdoors for some scientific experiments and apply the similarity rules."

Teachers suggested some creative educational methods in delivering the curriculum, which helps much in increasing students' assimilation. They mentioned that students need an exhibition to exhibit their crafts and other activities they do with

their own hands. As an example, social studies and geology teachers suggested some ideas including drawing Egypt's map on the ground so that the students can criticize the map and think about every related thing, why and how it is done, and this usually increases their critical thinking. They would have the experience of drawing on the pavement, making and demonstrating the map rather than just seeing it on their books. After finishing the map, students would walk inside the map exploring everything inside it creating the most unique creative experience they ever had during their educational journey.

Creative applications can be done outside; all teachers should have an outdoor session with their students even once a week, providing a place for some scientific experiments. This helps to strengthen the active learning and fix its pillars increasing the involvement process, linking the curriculum to the outside environment, examining it in a different way and understanding it more using natural elements; it is like doing simulation in the playground for different subjects, converting the abstract science to tangible, allowing students to practice everything manually.

Learning through landscapes has many other objectives that help enhancing the teaching/learning process together with students' abilities. Starting from the fact that students are practical learners who respond best to practical experiences, learning outdoors bring learning alive. It is clear that all subjects can be taught outdoors not only science and biology, the whole curriculum can be taught with creative hands-on experiences. LTL allows playgrounds bring the abstract theories to life, emphasizing the importance of participants learning by doing and reflecting on the experience. (LTL, 2008; Jose, et.al, 2017).

As for mechanics, students study the projectiles and the free falling processes outside, this helps remembering the laws with very simple real life applications. This gives opportunities in linking the subjects together as linking the projectiles to physics.

Also, many applications related to Maths can be measured outside. Making some measurement would be applicable such as: measuring the perimeter and the area of the playground, measuring the angle of elevation and the angle of deviation of any outdoor item and detecting the volume of the prism and other objects and measuring the angle of inclination. All these applications would make the students always remember the law and never get confused.

Maths which is structured or thought of by children can be either carried indoors or outdoors. Practicing Maths outside and allow children to estimate how long it would take to run or hop across a field (Creative Education, 2017). These activities are likely expected to be outside as much as teachers can do (Mart, et.al, 2015).

Moreover, there are many related fields to "Physics" that can be done in the playground. Some applications include studying motion and many other

measurements as acceleration and velocity, also heat and many experiments related to thermodynamics can also be studied outdoors. Being outdoors introduce different things as materials that have heat, adhesives and raw materials, all of these aren't very effective to be done inside the classroom.

This was supported by a 40 years old female Physics teacher who mentioned that large spaces for movement are needed together with many different friction surfaces to succeed in applying some physics applications

Moreover, there are many applications that can be done outside related to the "Geology", using natural samples making it easier and funnier for the students to understand the curriculum and move with it step by step in a logical way. Students can see different fine materials that can't be sensed in books, after this, they visualize things better and recognize it in its real form. In the playground, teachers can show the students the sand layers which was once fossils, examining fossils and searching for materials can be a kind of interactive activity, also the different types of rocks and how they can be transformed.

Geology is much related to the environment, sedimentation and climatology; a 50 years old female geology teacher stated that she teaches her students different types of soil and their formation as stones, sand, gravel, silk, clay, loam and minerals as lime stone and sand stone. They also study deserted and environmental system including wind, sand dunes, construction materials, rocks and other types which help in understanding curriculum much better through seeing all these materials live. Geology doesn't need a classroom; it is very easy to be studied in open areas. It is specialized with everything in the nature regarding the rocks, metals and sand study, and so it is very easy to understand and explain some examples from the nature with being in direct contact with the surroundings.

"Biology" is one of the most subjects that have outdoor applications. This helps students much in learning the purpose of their lessons, seeing real life applications that help understanding the curriculum in a better way. Planting is one of the most important things that facilitate this, showing the difference between deserted and environmental system, having sun or solar cells instead, air and wind that keep plants alive, taking care of each plant according to its circumstances is a must. Also, saving water for and from irrigation that can have different further applications related to water analysis and plants decomposition.

Choosing some insects and reptiles to study them under the microscope, also having some animals in the playground including rats, rabbits or any other tamed animals. Students can do some experiments on these animals as trying to extract some drugs and medicines. This can later be analyzed by them and some specialists to study their effect on the nervous cells in the human body; this will encourage them to search for much information in this field. The study of both animals and plants would be very helpful in the playground as they study natural things and this will

increase their understanding to the nature and in understanding the scientific content in a natural setting.

Teachers performing this process would have an outstanding effect on their students encouraging them to enjoy learning. This helps much in increasing students' curiosity to learn and promotes their academic achievements; it provides students with important skills needed for the employment market. In addition, it may enrich the curriculum and improve the educational attainment leading to improve children's cognitive abilities (EOTC, 2016). Generally, it always makes good pedagogical sense to offer real life environmental experiences for children to enrich their natural curiosity. Science educators, especially in early childhood, have argued that children learn best through discovery and interaction with concrete experiences (in Malone & Tranter, 2003).

Understanding

Learning outdoors has much to do with "Understanding". It was found that it have a positive effect on student's understanding, love and recognition to the teacher and the curriculum; it helps students understand the curriculum better. Many teachers as Chemistry and PE teacher mentioned that there is a strong relation between doing activities outdoors and understanding the lessons deeply.

This was also supported by a 35 years old male music teacher who mentioned that making applications to the projects allows for better subject understanding, reliefs the suppression of studies, and increases the active learning and helps memorising better. He then added "I think we should teach our students to link music with their practical subjects as physics for example. They should learn how to link the music vibrations to those in physics law, which will allow for better understanding of a very difficult subject."

One of the great achievements of learning outdoors is that students don't have to ask about the purpose of the lessons they learn. They can see its real life application and this facilitates the understanding process.

This was supported by a 42 years old female Geology teacher who mentioned that students nowadays are very smart, and they need many proofs for the studied phenomena. Learning through landscapes is very effective in teaching difficult contents.

Learning through Landscapes institution mentioned that natural materials help much in the learning process as being considered open ended resources. They can be whatever the children want them to be, stimulating their imagination. This process helps students to understand real science including rockets, air-pressure (using water bottles), scientific experiments and so on, experimenting them in comparative to their theories and then evaluating the results (LTL, 2008).

It's observed that this process doesn't teach students the abstract information; it requires much effort to establish the idea of dealing with the student's sensory perception which facilitates the students accommodating and memorizing ability.

Play Learning

Finally, talking about "Play Learning" is a must when mentioning ways of enhancing education. This stems from the fact that all education stakeholders have the faith that activating "Learning through fun" process would help teaching and learning to be as funny and easy as it can be.

When thinking about "play" in the context of learning outdoors, students need to have daily free play experiences, and so, several factors should be kept in mind. For example, play can be a part of formal learning which happens during class time and can be directed according to the required curriculum. In addition, the informal learning that happens during breaks and other free time that contains much curriculum can be covered during this time. The playtime activity can be used as a stimulus to formal work during class times (Robertson, 2014).

Teachers and students together mentioned that doing simulations in the playground are very effective, nearly everything around them can be simulated and this gives the chance of mixing the educational and entertainment parts, facilitating and increasing students' understanding.

This was supported by a 47 years old male physics teacher who mentioned that teaching outdoors has the role of mixing the entertainment together with the educational part stating that. "We can study the projectiles and the free falling outside, seeing these experiments live is more important than studying them in the books, it helps students examine the curriculum in a different way"

This was supported by the 35 years old female English teacher who mentioned that using the outdoors in having natural samples makes it easier and funnier for the students in understanding the curriculum and so activating "Learning through fun" process. She added "if kids have this concept from an early age, it would be much easier for them to accept change in the educational system".

Malone and Tranter similarly mentioned that schools' playing is very different from playing in any other facilities as parks. Supervised play in any educational context has close attachment to a hidden curriculum that tells the children a story about their culture and ethos of the school without being taught. It includes many steps of learning (doing, exploring, discovering, failing and succeeding) (Malone & Tranter, 2003).

A rich play environment also allows children to make wide range of choices, where there are many possibilities to invent and extend their own play. Having affordable place, time and permission to play as play grounds helps children to grow, the type, quality and diversity of children's play environment directly affects the quality of the children's play (Malone & Tranter, 2003; Playwale, 2015).

Teacher's Suggestions

Teachers suggested some spaces that help in re-designing the play ground and facilitate the process of outdoor learning, as follows.

Natural zone

Customized well-planted regularly-maintained school gardens with many plants, trees and flowers would be very helpful in fulfilling the objective of the curriculum. This zone can help in teaching students more about garden items, also would help in teaching genetics and Mandal theory very easily, also this would be of great addition for drawing the nature.

Water Play Zone:

A pond with many species of fish would be very helpful for student's assimilation and to take great responsibility for their care. This zone would be helpful in teaching students fish farms related to their curriculum.

Open space, Theatre like space:

An activity zone that can be used by many subjects (Library, Music, Art, etc.) helps in increasing the integration between the subjects. This space should be equipped with tables, chairs, mats and so on, which helps to increase the ability of students to hear and see each other.

Seating area:

Seating area should be provided in the playground. There should be tables and benches in the playground for the students to rest. Also the grass should be cleaned to be used as seating area.

It's very important for the benches to be comfortable and easy to clean. The distribution of the chairs is also very important; they should be rounded to allow teachers to see all the class.

Shaded and Semi-shaded areas:

Tents and pergolas are ideal spaces for learning; every group of students can sit and work together, it will only need some control from the teachers themselves.

Dramatic play zone:

This zone would be helpful in creating a good setup for practicing a play for the English/Arabic teachers in coordination with the music teachers.

Service play zone:

A service zone for storing the different educational materials, tools, equipments and drawing items would be very helpful. This zone should also contain water for both cleaning and sterilization processes. Tables and cupboards are also needed for the biology materials; this would help much in the learning process.

Scout Tents:

Scout tents usually add suspense to the educational atmosphere, especially at night, students can wake up at night to use these tents in different ways.

Drawing zone:

Allocating a specific place for drawing, this place should be equipped with some chairs and drawing based surfaces (a stand or any other alternative). It should be a place that enhances students' imagination. This zone may have empty spaces on the walls ready for sticking some papers, light cartoon or wood to draw on.

Conclusion

Learning through landscapes LTL is an ever growing educational trend that depends on learning from nature. The playgrounds of schools in Egypt showed to have the capabilities for fulfilling a great deal of the LTL objectives.

Findings showed that learning in school grounds has five main advantages. These include (1) Improved attainment, (2) Interaction with Nature and Biodiversity (3) Physical and Mental Health (4) Psychological Wellbeing and (5) Social Relationships. Each category was found to have a close relation with the design of school grounds, and the LTL objectives.

This paper mainly triggered the "Improved Attainment" category; it showed how the outdoor learning can enhance the learning and teaching process, increasing their efficiency. This process was divided into 5 sub-categories, namely (1) Productivity (2) Creativity (3) Creative Educational Methods (4) Understanding and (5) Play Learning.

Therefore, teachers suggested having certain spaces and elements to facilitate outdoor learning in close relation to LTL. These included: (1) Natural zone (2) Water play zone (3) Theatre like space (4) tables and benches in their natural form (5) tents and pergolas (6) Dramatic play zone (7) Service play zone (8) Scout Tents (9) Drawing zone. The design details and application of each zone can be in detailed studied in a further research.

On the other hand, the small size of some school's grounds and the cost of the study can be a limitation for some schools in such application.

These results are hoped to contribute to broadening perspectives to educational approaches and practices in Egypt, towards improving the whole learning and teaching processes in the Country.

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