

Integrating Landscape into Early Childhood Development in Kabul, Afghanistan

By

Samira Thomas

BA in Urban Studies  
Brown University  
Providence, Rhode Island (2010)

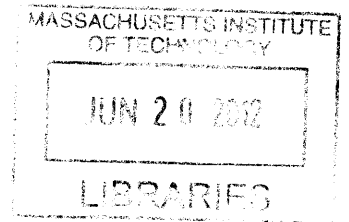
Submitted to the Department of Urban Studies and Planning  
in partial fulfillment of the requirements for the degree of

Master in City Planning

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

ARCHIVES



June 2012

© 2012 Samira Thomas. All Rights Reserved

The author here by grants to MIT the permission to reproduce and to distribute publicly paper and electronic copies of the thesis document in whole or in part.

Author \_\_\_\_\_  
Department of Urban Studies and Planning  
(date of signing) 24<sup>th</sup> May 2012

Certified by \_\_\_\_\_  
Professor James Wescoat  
Aga Khan Professor, School of Architecture and Planning  
Thesis Supervisor

Accepted by \_\_\_\_\_  
Professor Alan Berger  
Committee Chair  
Department of Urban Studies and Planning

# **Integrating Landscape into Early Childhood Development in Kabul, Afghanistan**

by Samira Thomas

Submitted to the Department of Urban Studies and Planning

May 24, 2012

in partial fulfillment of the requirements for the degree of

Master in City Planning

Thesis Supervisor: Professor James Wescoat,

Aga Khan Professor, School of Architecture and Planning

---

## ABSTRACT

This thesis is an exploration of children's educational interactions with their landscape in Kabul, Afghanistan, and the ways in which landscape, as an important contributor to human development, can be integrated as a topic and as the setting of learning, into the early childhood curriculum in a meaningful and contextually appropriate way. The spaces of learning have increasingly become important components of engagement in education research - the concept of "environment as teacher" is incorporated into this research study as a critical component of learning.

This thesis has explored teacher willingness to participate in integrating landscape into the early childhood curriculum in their school, the Sparks Academy in Kabul, Afghanistan. The concept of landscape was approached both as the *space* of learning as well as a topic of study. It takes an approach to learning that moves beyond access and into the content and pedagogical style of teaching.

This research concludes that Sparks is currently a community of enthusiastic teachers who wish to engage students in their learning in meaningful ways. There is a potential to build on current practices and turn current practice into an even more meaningful learning experience for young children in Kabul, Afghanistan. In particular, it extends the meaning of the Bagh-e-Babur from a space of cultural engagement, to a place of significant learning for Kabul's young.

## **Table of Contents**

---

|  |     |
|--|-----|
| ACKNOWLEDGEMENTS.....                              | 4   |
| INTRODUCTION.....                                  | 6   |
| CONCEPTUAL FRAMEWORK.....                          | 16  |
| METHODS.....                                       | 25  |
| UNIT OF INQUIRY: BABUR – A MAN AND HIS LEGACY..... | 33  |
| THE CLASSROOM.....                                 | 37  |
| THE CLASSROOM: LESSONS.....                        | 51  |
| THE SCHOOLYARD.....                                | 59  |
| THE SCHOOLYARD: LESSONS.....                       | 72  |
| THE CITY: BAGH-E-BABUR.....                        | 82  |
| THE CITY: LESSONS.....                             | 97  |
| CONCLUSIONS/IMPLICATIONS.....                      | 106 |
| BIBLIOGRAPHY.....                                  | 113 |
| APPENDIX.....                                      | 117 |

## ACKNOWLEDGEMENTS

---

It is impossible to express my gratitude to Professor James Wescoat who has been an incredible mentor, advisor, and most importantly, teacher, to me over the last two years. His love of learning is infectious and his patience and encouragement through the thesis writing process was invaluable. I feel incredibly lucky to have had the opportunity to learn from him.

I would also like to thank Bish Sanyal, my reader, whose encouragement, trust, and piercing questions improved this research enormously.

The administrative staff at MIT has been enormously helpful in making sure that this research was completed in time. Sandy Wellford and Kristen Greco have been wonderfully cheerful resources to lean on.

This research would have been impossible without the cooperation of the teachers at Sparks Academy in Kabul. The director, Roshan Thomas, was exceptionally helpful in providing insights in planning this research based on her extensive experience in Afghanistan. Many thanks also go to Dawood Azemy, who provided translation and assisted in conducting the on-the-ground research. Thanks also goes to Tahmina Shayan for her help with connecting with the gardening expert.

There are many more that have supported me in innumerable ways as I have tried to complete this research: my friends and colleagues at MIT for their daily encouragements, and in particular, my family who have always been a source of inspiration.

*For the maternal and paternal forces in my life,  
and in the lives of the children of Afghanistan.*

## I. INTRODUCTION



*Children make their way to school in Kabul in January, 2012.  
Credit: Sparks Academy in Kabul*

This thesis is an exploration of children's educational interactions with their landscape in Kabul, Afghanistan, and the ways in which landscape, as an important contributor to human development, can be integrated as a topic and as the setting of learning, into the early childhood curriculum in a meaningful and contextually appropriate way.

### **Problem Statement**

#### *Afghanistan's Children*

Children, who make up half of the population in Afghanistan, are widely held to be some of the most at-risk and vulnerable children in the world (Bailey, 2011). Indeed, the challenges are so great in Afghanistan that in 2009 the UNICEF regional director for South Asia, Daniel Toole asserted that "Afghanistan today is without a doubt the most dangerous place to be born" (Siddique, 2009). Three years later, the challenges that these children face on a day-to-day basis persist: continued violence in much of the country, poor access to health and education services, and continued exposure to the social remnants of war.

Young children in particular are vulnerable to the legacy that the wars have left – Afghanistan has one of the highest mortality rates for children under five years old in the world. Of the over 450,000 internally displaced people, more than 54 per cent are children. Landmines continue to be a problem; only 27 percent of areas with landmines have been cleared. Particularly tragic, many mines were embedded in toys in order to specifically target children, who would be drawn to the toy. Once a symbol of play and joy, these toys are now dangerous to the innocent of the country. In this environment, it is heartbreaking, but unsurprising to learn that on average, two children per day die in Afghanistan as a result of the ongoing conflict (Bailey, 2011).

#### *Education in Afghanistan*

There is a deep tradition of learning in Afghan history that reaches back far beyond the recent challenges that decades of war have caused. However, the current educational climate in

Afghanistan is one that, first, has an imbalance of access in the rural and urban environments: in urban areas the attendance levels in primary school (children aged seven to 12 years old) is 73 percent, while in rural areas this number is closer to 47 percent (UNICEF, 2010). Second, discrepancies between attendance for female and male students indicates that women are far less likely to be educated, even at the primary level, than males, a trend that is perpetuated through from the earliest years of life to adulthood, according to the statistics from the World Bank and UNICEF. Indeed, the net intake rate at grade one of school aged children is only 49 percent of the total population of school aged children, which, when broken down by gender is 40 percent for girls, 58 percent for boys (World Bank, 2007). Third, children do not receive adequate teacher attention because of overcrowding in classrooms. With official numbers putting national primary school enrollment at 5,279,326 children and the number of primary school teachers at 118,858 (of which 31 percent are women); the pupil to teacher ratio in 2010 was 44 students for each teacher (World Bank, 2010).

### *Teaching*

Ultimately, the question is not only the ratio of students to teachers, but rather, a question of teacher ability. A good teacher can provide an opportunity for educational engagement with limited resources. According to the Afghan Ministry of Education (MoE) *National Education Strategic Plan*, one of the key obstacles to quality education is the capacity of teachers. With few teachers achieving more than high school education, and only short term in-service training for classroom teachers, the quality of teaching is unlikely to improve without a significant investment in understanding how teachers best learn to teach. Most interestingly, the paper states that “existing classroom-based methods are not effective in making students literate or numerate nor do they develop the critical thinking and analytical skills of students” (Islamic

Republic of Afghanistan Ministry of Education, 2004). A solution to this problem has not yet been found, however, this thesis suggests that guiding teachers to integrate landscape into lesson planning and curriculum can possibly provide a space for transformation in teaching and education in Afghanistan to move from the current typical teaching style. It is also important to note the MoE's reference to "classroom-based methods", indicating that there may be an openness to methods that move beyond the classroom.

### *Beyond Statistics*

There are intangible impacts that the war has left that are more challenging to quantify, and yet pose a significant risk to the development and wellbeing of the children of Afghanistan.

Specifically in Kabul, the war has left children with limited access to the natural environment, and, perhaps most importantly, spaces that provide opportunities for children to engage their creativity and develop resilience in the face of war and other day-to-day challenges of life in Kabul. Although in the context of this paper, landscape will be explored in relation to ideas of learning, the link between education today and the mitigation of future conflicts is not inconsequential, as many, including Maria Montessori, founder of the Montessori early childhood development program, and Loris Malaguzzi, a founding member of the Reggio Emilia program, argue quite convincingly (Montessori, 1992; and Edwards, 1998).

## **Context**

### *Concepts in Education*

Trends in education have shown a cycle of debate throughout history and across cultures: from the Socratic method of ancient Greece that emphasized the role of the teacher as questioner and learner as explorer and responder; to rote memorization techniques used in regimes such as that of the Soviet Union; to the learner as questioner and teacher as guide of theorists that include

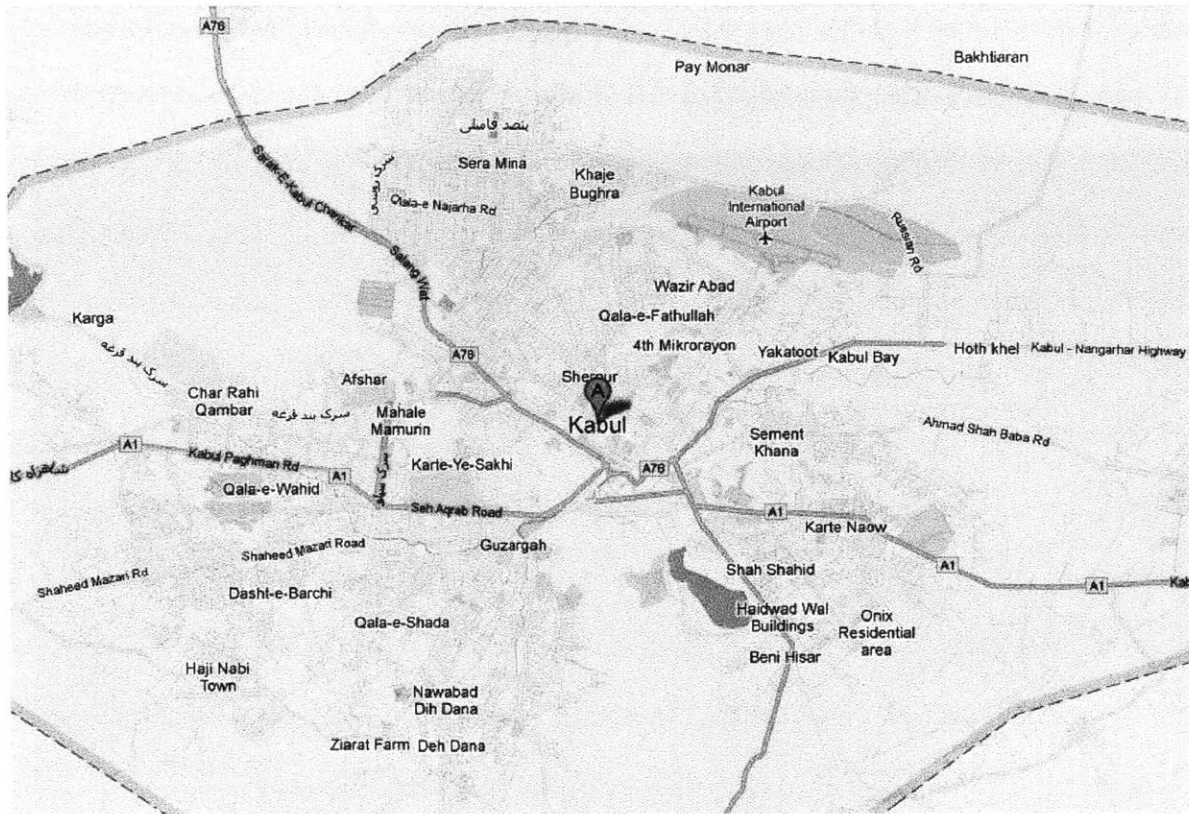
Jean Piaget. A variety of methods have been used in traditional cultures, including the use of storytelling and parables, as a means of transmitting knowledge from teacher to student.

Throughout the ages and around the world, therefore, the best or most appropriate methods of teaching have been debated and tested. Current trends in early childhood developmental research suggest a highly effecting means of educating children is by giving them the opportunity to explore their world freely, but with a teacher as a guide, following their own interests and testing the boundaries of experience.

The spaces of learning have, therefore, increasingly become important components of engagement in education research – they form the context of the learning, and provide (often subtle) cues to learners that teach, as they explore, create, and respond. Indeed, the concept of “environment as teacher” is incorporated into this research study as a critical component of learning. Here, it is important to note that the term “spaces” can connote a variety of meanings. In keeping with Piaget’s theories, including his ideas on the child’s conception of space and the child’s conception of the world, spaces are defined to include physical, social, and imagined spaces. While the built environment has seen increased popularity in determining learning spaces, children still need to maintain a connection with their natural environment. In Kabul, the political conflict over the last four decades has destroyed many of the urban natural spaces that are easily accessed by the young.

Uniquely, outdoor spaces often provide beautiful opportunities for social, physical and imaginary interaction, if framed appropriately and thoughtfully to the young visitors who come to these spaces. As a result engagement and learning in the natural environment is increasingly being recognized as an important component of education.

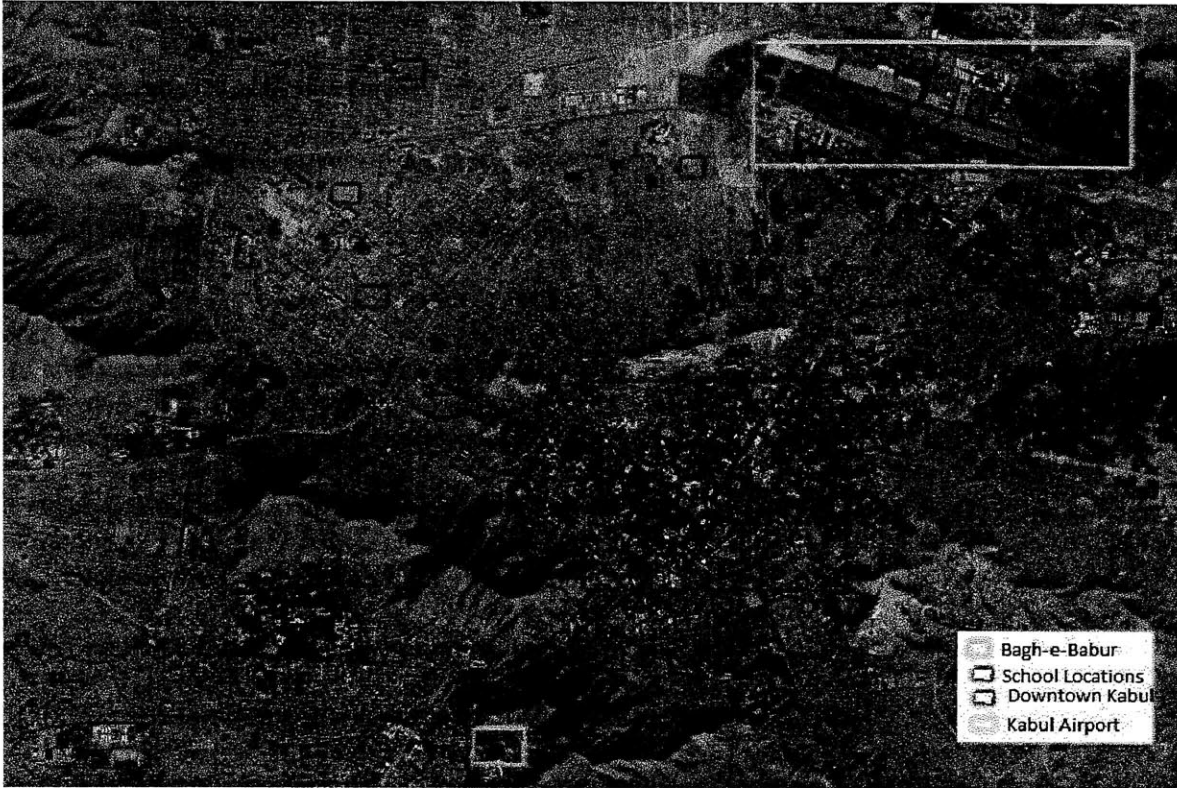
*Kabul, Afghanistan*



*Map of Kabul indicating major roads and institutions.*

Kabul, a city currently undergoing unprecedented levels of development and change, provides a unique opportunity for creating learning environments. However, there are many unanswered questions about the type of learning that does, does not, and yet possibly *can* occur in Kabul. What is possible? What can be hoped for? There is potential for the creation of natural learning spaces: much of Kabul's neighborhood development happens informally – homes are built and spaces are used in ways that do not conform to a formal master plan, and, as a result, has left room for small scale interventions. As it currently stands, child-friendly spaces that provide opportunities to interact with the natural environment are few in Kabul, particularly after years of war and the recent development agenda that, for a variety of reasons, does not prioritize children in urban planning. Schools in Kabul, therefore, have the opportunity to act as catalysts for

environmental learning by influencing surrounding spaces in the school neighborhood to make them more conducive to children's learning.



*Map of Kabul indicating school locations, Bagh-e-Babur site, Downtown Kabul and Kabul International Airport.*

In Kabul, there are four Sparks Academy (Sparks) schools that operate Early Childhood Development (ECD) programs that provide educational opportunities for young children and their communities. With a mandate that goes beyond simply educating Kabul's young, but enabling Afghan communities to realize their full potential, Sparks may be particularly poised to act in this catalytic capacity. With leadership that is not currently over-extended as is the case in many government run schools, and a highly supportive parent and neighboring community, it has the right ingredients for catalyzing the establishment of an environmental curriculum for Afghanistan with the purpose of connecting learning and landscape for young children.

Bagh-e-Babur, Babur's Garden, is one example of an ideal opportunity of integrating learning and the built environment in Kabul as it is an engaging place for children to play, and provides a setting that is at once natural, historic, and socially and culturally relevant. These elements are important for providing an engaging and holistic learning environment for children. This exceptional space is used as inspiration for potential learning activities with teachers.

However, teachers in Afghanistan generally follow the teaching style that expects information to be memorized. In order to truly establish a practice of place-based engagement-centered learning, teachers must support and participate actively in making this goal a reality.

This thesis, therefore, seeks to understand the potential for a place-based (or, more specifically, a landscape-based) learning program that is built on the capacity and views of teachers. The research conducted in this study will provide the first step in understanding the potential of integrating place in education, which Sparks and other like-minded schools in Kabul can then use as a basis for future practice.

This chapter focuses on framing the problem of education, natural landscape and young children in the challenging social, physical and political environment of Afghanistan.

Chapter Two explores the existing literature that concerns this research study and outlines the conceptual framework that guides this thesis. It establishes the foundation of this research in theories of learning and education, with a particular attention to child-centered learning, emergent curriculum and a connection to spaces of learning.

Chapter Three outlines the methods used in this study. These methods include a survey of a majority of Sparks teachers regarding their views on landscape education, locations of learning and how these spaces can be connected through curriculum and assessment strategies. This survey was translated into Dari in order to include a wider group of teachers as many of them are

not fluent in English. Chapter Three also outlines the interview protocols used to conduct in-depth interviews with a teacher at Sparks and a local gardener. The chapter concludes with a proposed unit of inquiry that integrates landscape as a topic as well as a setting for lessons in the classroom, the schoolyard and the city (specifically at Bagh-e-Babur).

Chapter Four focuses on the classroom as a primary learning space for young children enrolled at Sparks. The chapter first looks at the current physical spaces of classrooms at each of the three Sparks sites. It then analyzes the results of the teacher survey, which describes current curricular and assessment strategies used in the classroom. Finally the chapter provides a suggested series of lessons as part of the inquiry-based lesson proposed in Chapter Three. These lessons are specific to the classroom and prepare students for subsequent lessons in the schoolyard and city.

Chapter Five moves the analysis to the schoolyard. It first provides a description of the different spaces at each of the Sparks sites: two of the programs have paved space surrounded by walls, while the third site has a small plot of unplanned space that can be shaped by Sparks for educational purposes. The results from the survey regarding potential teacher practice and curricular amendments are then analyzed. Finally, the chapter concludes with a series of lessons to be incorporated into the unit of inquiry outlined in Chapter Three that build upon lessons from the classroom, and prepare students for their next series of lessons in the city, at Bagh-e-Babur.

Chapter Six of this study moves the space of learning from the immediate vicinity of Sparks to Bagh-e-Babur. None of the current Sparks programs are within a 30 minute walk of Bagh-e-Babur, and therefore this provides an opportunity for young children to experience the landscape of their city as part of an educational activity. The chapter particularly focuses on Bagh-e-Babur as a safe site for young children to engage and learn. The chapter describes the space of Bagh-e-Babur, as well as some of its history; context that is important to understand as it is visibly

present in the physical space of the garden. The chapter then concludes with a series of lessons that connect to the unit of inquiry developed in Chapter Three.

Chapter Seven provides conclusions based on the teacher responses from the survey as well as interviews with the teacher and gardener from Sparks. It suggests that teachers are generally open to teaching about landscape and with several moderate changes, would be willing and able to teach in a variety of spaces that could draw important connections for young children growing up in Kabul. The lessons from this research will be presented to Sparks and the unit of inquiry will be implemented as a pilot program. The Bagh-e-Babur Trust has expressed interest in exploring new forms of engagement for children at the garden, and with the appropriate training of guides who work at Bagh-e-Babur, an opportunity exists to make learning experiences suggested in this research available to a broader group of children who visit the garden.

## II. CONCEPTUAL FRAMEWORK



*Roshan Thomas, the Director of Sparks Academy in Kabul, conducts a lesson at a Sparks Teacher Training, March 2012.  
Credit: Sparks Academy in Kabul*

The framework of this study follows the concept of environment and learning in the Afghan context: from classroom to schoolyard to city. In the context of Kabul, the “city-wide” learning is represented in a unique space, Bagh-e-Babur, where nature, culture, history, and society meet. As physical spaces, the classroom, the schoolyard and the city are significant for child development and represent varying levels of formality (or informality) in learning. For the most part, they also represent varying amounts of time that children spend in these spaces. Below is a matrix of the space, time and learning format:

|               | Five hours or less per month | Five hours per week      | Three hours per day |
|---------------|------------------------------|--------------------------|---------------------|
| Classroom     |                              |                          |                     |
| Schoolyard    |                              |                          |                     |
| Baghe-e-Babur |                              |                          |                     |
|               | Informal Learning            | Semi-structured learning | Formal Learning     |

Classrooms are widely considered to be the primary place of learning, and in many cases, this is the venue of formal learning. However, this research considers the potential of other, less frequented spaces that can act as spaces of learning.

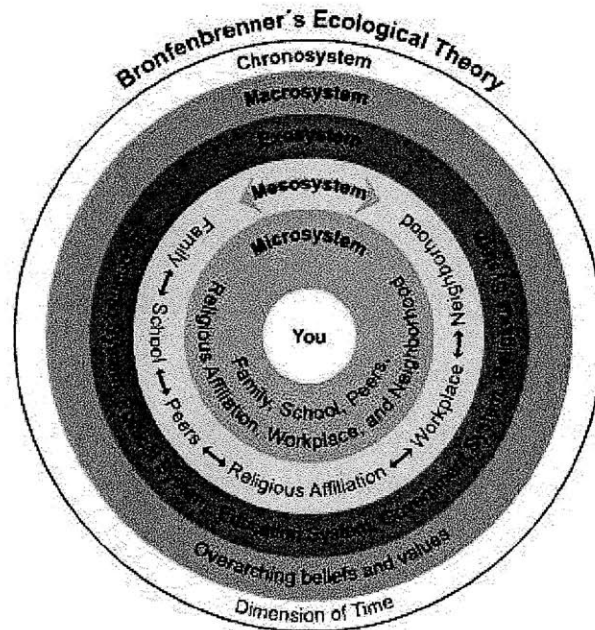
### Theories of learning

*Learning* is a notoriously challenging term to define. While many have looked at learning as the acquisition of knowledge, there exists an extensive debate on what knowledge actually is and how that acquisition takes place. In the *didactic* approach knowledge has been thought of as a definable set of information that can be transmitted by a teacher and learned by a student (Hein, 1998). However, a more recently popularized approach, known as the *constructivist* approach associated with the theories of Jean Piaget and John Dewey, allows learners the opportunity to

construct their own learning and create meaning based on their “own impressions, ideas, and experiences.” (Tishman, McKinney, & Straughn, 2007, p. 3).

In the first scenario, learning can be easily identified: when knowledge is defined as a set of information to be learned, a test can be administered to identify how much ‘knowledge’ a student has gained. The constructivist approach does not offer the same ‘testable’ means of measuring learning. Observation, measurement, and identification of meaning-making are challenging, but are in agreement that “learning involves active cognitive and sensory engagement rather than passive absorption of information.” (Tishman et al, p. 11).

The idea of cognitive and sensory engagement as important components of learning begins to point to Uri Bronfenbrenner’s Ecological Systems Model depicted below:



The model shows the child in the center of the ecological system. The microsystem, indicates the areas of life that are most important to the child’s development: family, school, peers, workplace (or in this case, school) and neighborhood. As we move out along the systems from the center,

the variables become less immediate, but still important to the development of the child. There is a clear connection in this research between child and the child's environment.

### The importance of place

The constructivist approach has demonstrated the importance that environment and space play in shaping the engagement of children, both in terms of content and in terms of style of play. Given that sensory engagement is paramount in early learning and that “sensory experiences link the child's exterior world with their interior, hidden, affective world” (Louv, 2008), the environment in which children are playing is central to understanding what and how children learn in their early years.

### *The classroom*

The five primary senses are not the only relevant senses for understanding child-friendly spaces. Indeed, as Malaguzzi explains, children are able to experience space in a much deeper way than the five primary senses describe. The *feeling* of the room, plays an equally important role – a sense of magic, imagination, nooks, places to hide, and large rooms that are broken up into smaller spaces, all provide children with the *sense* that they are meant to be in that place, that they are welcome (Day and Midbjer, 2007). Day (2007) separates spaces into four primary elements of design:

1. Light and darkness: Children, and people generally, are attracted and made happy by light. But happiness is not all – children working in well-lit classrooms have been found to “progress 20 per cent faster in math and 26 per cent faster in reading” than children in poorly lit classrooms. Light, therefore, certainly plays a role in learning (p. 101).

2. Color: Children are often found to react to color in particular ways. Day explains Bayes' research on children and color, explaining that reds are often exciting for children, while browns and dark wood feels "'indoorsy' and cosier" (p. 115).
3. Shape and Quality: Day suggests that designers consider questions like: how do the planes of the walls meet? Are angles obtuse and therefore more open, soft and welcoming? Or are angles acute and harsh?
4. Materials and Mood: mood is created according to the materials used. Is the space touch-friendly? Does it allow children to engage in more than one sense? Is the space homey or does it give the child a feeling of being in an institution?

Considering rooms based on these typologies enables a better understanding of whether spaces are designed with children in mind, or are conceived with little thought for young visitors. These qualities are equally important when thinking about classroom design and the natural environment. Questions of visual accessibility to the outdoors, and the placement and design of natural spaces (or mimicking natural environments) that provide creative learning experiences for children within the classroom can follow a similar set of design questions of lighting, colour, shape and quality, and materials and mood.

A study conducted at Cornell University found that even the view of nature from a learning environment (i.e. a classroom) provides children with a significant level of psychological protection. "Life's stressful events appear not to cause as much psychological distress in children who live in high-nature conditions compared with children who live in low-nature conditions... And the protective impact of nearby nature is strongest for the most vulnerable children – those experiencing the highest levels of stressful life events." (Louv, 2008).

### *The Schoolyard*

Learning in natural outdoor spaces has historically been important, and indeed, the promotion of educational gardening “dates as far back as ancient King Cyrus of Persia”(Frost, 2010). These historic roots in Persian culture are an important link to make to learning in today’s Afghanistan and should be celebrated in programmatic activities that follow in this tradition.

In natural environments, children not only have opportunities to “stimulate all the senses” but also to “integrate informal play with formal learning.” (Louv, 2008). Indeed, Robin Moore describes the necessity of engaging in multisensory experiences from a young age as they “help to build ‘the cognitive constructs necessary for sustained intellectual development... natural spaces and materials stimulate children’s limitless imagination” (Louv, 2008). It is in and through the natural environment that children are able to be most creative with their play – few objects and spaces in nature are heavy handed in prescribing specific activities, and more often than not, objects in nature can easily be imagined to be something else: a stick can become a tool for digging, a magic wand, baton for twirling, or any number of other items that children can imagine: the list goes on. In describing the imaginative trait of children in the outdoor environment, Louv recounts that a small hill “for one kid at a certain point in therapy... was a grave; for another, it was the belly of a pregnant woman” (Louv, 2008). He goes on to explain that this type of creativity and imagination is not inherent to all forms or spaces of play:

“children interpret and give meaning to a piece of landscape, and the same piece can be interpreted differently. Usually, if you [use] traditional puppets and games, there are limits. A policeman puppet is usually a policeman; a kid rarely makes it something else. But with landscape, it’s much more engaging, and you’re giving the child ways of expressing what’s within.”

(Louv, 2008).

In natural play, children are able to find opportunities for developing resilience in ways that are often not possible or less likely in indoor spaces.

Natural spaces and play environments provide children with opportunities to develop resilience.

Following the observable traits of resilience outlined by Grotberg, natural play environments provide children with a higher level of self-worth. “Children with more nature near their homes... rated themselves higher than their corresponding peers on a global measure of self-worth. ‘Even in a rural setting with a relative abundance of green landscape, more [nature] appears to be better when it comes to bolstering children’s resilience against stress or adversity’” (Louv, 2008).

Children also develop resilience through social connections, which Louv sees as particularly frequent in natural spaces. To Louv, and others in the environmental psychology field, nature provides visible emotional benefits as “green space fosters social interaction and thereby promotes social support” (Louv, 2008). The social aspect of learning in the natural environment is observable and will be important to integrate into the conceptualization of the urban garden as an environmental learning space.

#### Children’s Rights and Societies’ Duties: The Right to Learn, and the Right to Play

The world has recognized the importance of children attending school, and the importance of play and leisure time, by ingraining both as elements of the United Nations Convention of the Rights of the Child (Convention of the Rights of the Child, 1989). While this step signals to the world the importance of both education and play in the lives of children, it is perhaps misleading, as play often connotes frivolity, while the importance of education is rarely disputed. In reality, play is the primary medium through which children learn, and therefore the two work in concert.

As Frost explains, “play is manifested and elaborated through games and amusements and results in cognitive, social, motor, linguistic, and emotional growth and development” (Frost, 2010). As a result of the wide range of components of human development encompassed by play, recent theories of child development largely agree that it is an important element of learning, engagement and encourages healthy social, emotional, cultural and physical development in young children.

Play, and particularly outdoor play, is an opportunity for children to cope with psychological trauma. Opportunities for engaging the imagination offer children the time to understand, digest and make sense of the difficult and often confusing emotions and experiences that accompany war (Frost, 2010 and Louv, 2008).

Friedrich Froebel, the founder of the Kindergarten movement, describes play and its importance to child’s development in emphatically and poetically in saying:

“Play is the purest, most spiritual activity of man at this stage [of childhood], and at the same time, typical of human life as a whole – of the inner hidden natural life in man and all things. It gives, therefore, joy, freedom, contentment, inner and outer rest, peace with the world. It holds the source of all that is good... Play at this time [of childhood] is of deep significance... the germinal leaves of all later life.”

(Frost, 2010).

### Conclusion

The theories discussed above guide the conceptual framework of this thesis. As the research for this thesis was conducted and the suggested units of inquiry developed, the importance of place and spaces of learning and the need for children to connect with their environment is maintained

as a guiding principle. The current literature, however, does not fully encompass the reality of conflict zones as they relate to the natural environment. Safety and security concerns connected to the fear of open spaces that are often unsafe or unhygienic, for example, are not fully addressed as practical concerns in these theoretical frameworks. This research connects directly with teachers on the ground in Kabul who share their personal concerns and excitement in engaging with the landscape of their environment with their students. The following chapter begins to look at the methods used to conduct this research, specifically outlining the questions of content, resources, assessment strategies that were posed to teachers at Sparks.

### III. METHODS



*Teachers at Sparks develop resources in preparation for the next month of lessons.  
Credit: Sparks Academy in Kabul*

The methods of this study have evolved over the course of conducting the research. The following section first describes the initial plans, and continues to then describe the evolution of the methods made based on initial, informal conversations with teachers at the Sparks Academy.

### **INITIAL DESIGN/PLAN**

The initial thesis design and methods focused on students:

1. Children would develop a map of Kabul that indicates places of play, the natural environment, and commemoration. The maps would be developed over a series of lessons that would bring the students to an understanding of how they use different spaces, and how to identify characteristics of spaces that they like for certain activities. The maps would then be used as a means of understanding children's landscapes from the perspective of the children themselves.
2. The maps should include the children's conceptions of how these spaces are connected in Kabul. Indicating these three types of spaces on a map aimed to create a better understanding for teachers and researchers of the children's ability to access spaces where they can learn and develop resilience. Children should develop an understanding of the concept of commemoration.
3. Children should use their understanding of commemoration, as well as their experiences in Bagh-e-Babur, the Sparks garden, and in developing maps, to consider how they would design the Sparks garden. This will involve group work and will be done through the children's choice of media: a drawn representation or a built model.

Following a pilot conversation with teachers at Sparks for this project (outlined below) the research methods changed significantly to shift the focus from student to teacher, and from a practical learning experiment to curriculum development and teacher education. The value in

taking a step back lies in making a choice between doing *something* quickly versus taking a considered approach to future programs, one that responds based on a deeply understood current situation, and is therefore, hopefully, more sustainable and successful than one that tries to learn from mistakes after the fact.

**a) PILOT INTERVIEW**

---

The pilot interview with the teachers consisted of an initial conversation using Skype about the potential of taking six year old children to Bagh-e-Babur to conduct lessons in the outdoor space. The teachers, three of whom were part the conversation expressed excitement about the potential for new lessons, but were hesitant about two primary issues:

- 1) Teacher capacity to guide a creative lesson on Kabul's landscape
- 2) Student capacity to let go of the expectation of deference to teacher's desires and participate in a creative activity without inhibition.

The hesitation on the part of the teachers is justified. Although the SPARKS model is based on a student-centric approach to education, there is a level of teacher capacity that is required for a purely student-centric approach, and this has not yet been possible in Afghanistan, given the education that the teachers themselves have experienced. This would have been the first time that the teachers would be asked to teach a lesson with limited knowledge of the specific outcome, leaving that, largely, up to the students.

As a result of this reaction from the teachers, the thesis design needed to be altered, and is now exploring the teacher responsiveness and the potential for developing a landscape education curriculum in an early childhood center in Kabul.

## **b) REVISED METHODS**

Afghanistan's recent history has left much of its landscape damaged or, at the very least, altered. Landscape, in this context, does not refer solely to the natural landscape of the country, but also the personal household environment (home), socio-economic, and cultural heritage landscapes. The classroom in this context provides an enclosed safe space in which children spend a significant amount of time exploring and learning. The schoolyard, similarly, can offer a connection to the local community and to the wider environment, while still maintaining safety with the schoolyard's high walls that surround the space. The city as represented by Bagh-e-Babur in this context represents one important facet of Kabul's landscape – it is simultaneously a space that restores social connections, offers a carefully designed ecological landscape and is an important representation of the heritage of the city, and the region as a whole. As a result, it offers a unique learning opportunity for children in Kabul, however, the opportunity is not enough. In order to properly capitalize on the learning that can happen at Bagh-e-Babur, teachers must be willing and able to explore themes of landscape in its broadest sense inside the classroom and participate in learning experiences outside of the classroom.

The foci for the interview with teachers are:

- (1) Understand current practices with regards to natural, social and heritage landscapes.
- (2) Identify potential minor modifications to practice that teachers consider feasible.
- (3) Identify potential significant modifications to practice that teachers consider feasible.

Ultimately, the goal is to understand the potential of a more place-based emergent curriculum to evolve based on teacher perception of their capacities and capabilities.

While ideally these interviews would be conducted in-person, there were several important considerations to take into account.

First, the security situation in Afghanistan in recent months has made it very difficult to travel into the country for non-essential research purposes. Second, given the researcher's history and connection with the administration of Sparks, an undue pressure to participate in the research would be created by her presence in the school.

Instead, all interviews were conducted over online video-chatting (using Skype) with one of the more senior and well established teachers at Sparks, and the majority of teachers were invited to participate in a questionnaire that would gauge their comfort with slight and more drastic changes in their pedagogical practice.

### Questionnaire

The questionnaire (see Appendix One for English Questionnaire and Dari translation) is set up in three primary sections that follow the three goals outlined above: current practice, slight modifications to pedagogy, and significant modifications to pedagogy, which are reflected spatially from the classroom, to the schoolyard, to the city.

- i. The first section was posed to the teachers as an opportunity to understand what they are already doing in their classrooms. Specifically this involved questions of current topics covered in classroom lessons, the types of resources used and the content of those resources, and the assessment strategies.
- ii. The second section was posed to teachers as slight modifications that they could make to their current practice. For example, teaching the same lesson that they currently teach inside the classroom, but instead teaching that lesson outdoors. This also included ideas of content

and assessment, but importantly included questions about the distance teachers would be willing to take their students outside of the classroom space in order to reach a green space.

iii. The third section was posed to teachers as something additional that could happen if students stayed at school for an additional hour and were taught by a different teachers (that is, that the teachers being surveyed would not need to do *additional* work – another teacher would take care of this class time). The reason for this was to mitigate responses from the teachers that would be reluctant to add to their already busy work day. Using this method allows us to understand what the teachers think would be beneficial to students without feeling overwhelmed with the idea of adding to their already very busy teaching time. These questions brought in specific queries about potential student and teacher activities at Bagh-e-Babur.

### Interviews

One teacher interview was also conducted in order to better understand the responses from the teachers collected from the survey. An interview with a community gardener was conducted to understand, from one individual's perspective, a different angle on landscape education than may currently be present in the discourse.

i. Teacher interviews: the interview with the teacher were conducted with the head teacher. She is well established and has made teaching in an early childhood setting their career. She offered a variety of important perspectives as she understands how the other teachers engage. The teacher interview incorporated many of the same questions as the questionnaire administered to all teachers; however, these interviews took a semi-structured approach and included questions that were open-ended. The interview, much like the questionnaire, is divided into three primary sections: current classroom practice, potential schoolyard practice, and potential

practice in Bagh-e-Babur. The purpose of conducting this interview was twofold: first, to clarify ambiguities from the questionnaire, and second, to ask a similar line of questioning in a second mode, which will provide a more nuanced and rich understanding of teacher views on places of learning.

ii. Gardener/community member interview:

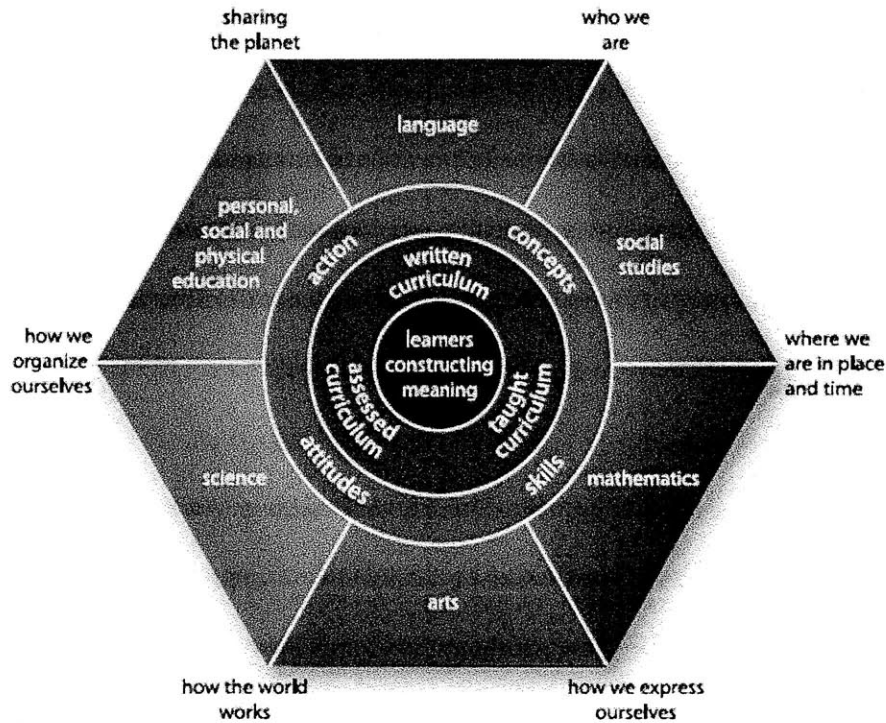
Teachers in both the questionnaire and in the interview were asked about local experts who could participate in educating the children in particular fields, in this case on landscape education. In many cases, individuals have local knowledge that may be unrecorded formally. This is a unique opportunity to try to capture some of the ideas that local sources of knowledge may have on the particular subject of landscape education. Ultimately this interview aimed to understand what this individual knows, and what he views as important lessons to pass on to future generations. This is by no means a comprehensive view of indigenous knowledge on the subject, but offers an additional perspective, and therefore a richness, to the study currently being undertaken.

### Curriculum

The learning routines for this research are derived from two well tested programs: first, the Reggio Emilia experiment, *Reggio tutta: a guide to the city by the children* (Davoli and Ferri, 2000), which explores understanding the city from the children's perspective, and second, Harvard Graduate School of Education's Project Zero *Making Learning Visible* thinking routines. It is important to note here that an endless number of lessons can be drawn from natural spaces or linked to the environment. This paper is focusing on one sequence of activities in three spaces: the classroom, the schoolyard and the city.

These lessons have been developed as part of one single unity of inquiry, entitled *Babur: A man and his Legacy*. The lessons are loosely structured following the International Baccalaureate

Primary Years Program (IB-PYP) Lesson Planner structure, which takes a constructivist approach to learning, while providing a detailed framework for children’s learning. Sparks is not an IB school, but given the internationally recognized quality of the IB-PYP program, using their framework as a guide is appropriate. The conceptual framework for the IB-PYP is as follows:



*International Baccalaureate Primary Years Program Academic Structure*

The centrality of learners constructing meaning becomes clear in this visual representation of the IB-PYP concepts (International Baccalaureate Organization, 2012). It is also important to note the transdisciplinary nature of learning in this program – each transdisciplinary theme (the outermost ring) has the potential to encompass each subject area, and must engage with the IB defined actions, concepts, skills and attitudes, which in turn are drawn from the written, taught and assessed curriculum. The following planner designed for this particular set of lessons follows the IB guidelines loosely and is intended to be taught over a two to three week period, rather than the six week period prescribed by the IB-PYP.

The following is the unit of inquiry, based on the IB guidelines, developed specifically for Sparks as part of this research.

**Planner: Babur – A man and his legacy**

|                                       |   |
|---------------------------------------|---|
| <p><b>Transdisciplinary Theme</b></p> | <p>Sharing the planet: Inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; human and natural communities and the relationship within and between them; access to equal opportunities;</p>  |
| <p><b>Central Idea</b></p>            | <p>Peoples and Landscapes influence each other</p>  |
| <p><b>Lines of inquiry</b></p>        | <ul style="list-style-type: none"> <li>• My landscape</li> <li>• Babur’s landscape</li> <li>• Others’ landscape</li> </ul>  |
| <p><b>Teacher Questions</b></p>       | <ul style="list-style-type: none"> <li>• What is landscape?</li> <li>• Where do we play?</li> <li>• How does landscape impact us?</li> <li>• How do we impact landscape?</li> <li>• What are our responsibilities in impacting landscape?</li> </ul>  |
| <p><b>Key Concepts</b></p>            | <ul style="list-style-type: none"> <li>• <u>Connection</u>: <i>How is it connected to other things?</i> The understanding that we live in a world of interacting systems in which the actions of any individual element affect others.</li> <li>• <u>Perspective</u>: <i>What are the points of view?</i> The understanding that knowledge is moderated by perspectives; different perspectives lead to different interpretations, understandings and findings; perspectives may be individual, group, cultural or disciplinary.</li> </ul> |

|   |   |
|---|---|
|   | <p><u>Responsibility:</u> <i>What is our responsibility?</i> The understanding that we are not passive observers of events but that we can make and must make choices and that, by doing things so, we can make a difference.</p>   |
| <p><b>Deliverables</b></p>                        | <ol style="list-style-type: none"> <li>1. Group: children will design and transform classroom into a “paper garden”</li> <li>2. Individual: children will plant and care for flowers</li> <li>3. Individual: children will write and illustrate a story from the perspective of a plant, animal or part of their landscape</li> <li>4. Group: children will collectively write and perform a play about Babur and his connection to peace and landscapes.</li> <li>5. Small group: children will make a map of their landscape</li> </ol>   |
| <p><b>Formative Assessment: The Classroom</b></p> | <ol style="list-style-type: none"> <li>1. Questions: each child will be asked to come up with a question about growing plants that they can pose to the local expert gardener.</li> <li>2. Painting flower boxes: elements they use to decorate the box.</li> <li>3. Participation in the perspective game: rubric to establish if children are able to consider different perspectives from their own</li> <li>4. Initial stage of map: rubric of observed elements in their environment: what do they currently notice? Rubric of behaviors: how do they work together in small groups?</li> <li>5. Connections made following the story of Babur.</li> </ol> |

|  |  |
|--|--|
| <p><b>Formative Assessment: The Schoolyard</b></p> | <p>6. Questions: children should ask questions based on the gardening expert’s presentation.</p> <p>7. Planting in flower boxes: following the discussion, the gardening expert can walk the children through planting their seeds in the flowerboxes they decorated.</p> <p>8. Dancing: teachers can play an outdoor dance game “Doornoma Dancing” which translates to “Landscape Dancing”.</p> <p>9. Map of garden: in order to have children better understand mapping and observe their outdoor space more carefully, they will be asked to explore the space and then get into groups of three and map their courtyard or garden.</p> <p>10. Connections made following the story of Babur.</p> |
| <p><b>Formative Assessment: The City</b></p>       | <p>11. Questions: each child will be asked to come up with a question about Bagh-e-Babur that they will pose to their teacher, or, if possible, a guide who works at Bagh-e-Babur.</p> <p>12. Exploring Water: children can look at the different water channels in the garden and try to understand how they work.</p> <p>13. Participation in the perspective game: what do the children see in the garden and how can we tell a story with that perspective?</p> <p>14. Bagh-e-Babur Map: what do the children notice? How does this space connect with their school, their home and their community?</p> <p>15. Babur and his garden: what do the children understand about</p>                  |

|                             |  |
|-----------------------------|--|
|                             | Babur's life now that they have visited his garden?  |
| <b>Summative Assessment</b> | <ol style="list-style-type: none"> <li>1. Use of elements incorporated into discussions when designing the classroom-as-garden.</li> <li>2. Consistency in effort in caring for plant.</li> <li>3. Engagement in writing and illustrating their own story, ability to demonstrate effort in considering the story from another's perspective.</li> <li>4. Participation in play about Babur.</li> <li>5. Final map (following additions included after schoolyard and Bagh-e-Babur visit)</li> </ol> |

(International Baccalaureate Organization, 2011)

The individual lessons are elaborated in each chapter that correspond to where the lesson is taught (i.e. lessons intended for the classroom are elaborated in the next chapter which deals with the classroom content and potential).

The subsequent chapters will deal primarily with the results of the survey and interviews and propose activities based on this unit of inquiry for each of the teaching spaces.

#### IV. THE CLASSROOM



*A classroom decorated with low-cost materials made by students in class at Sparks.  
Credit: Sparks Academy in Kabul*

Recognizing that space and pedagogy are heavily linked, particularly in the early years of education and development, it is important to first think about the classroom space, not only as a place of learning, but as the *primary* space of formal learning for young children, as well as a space in which children spend a significant amount of time. The classrooms at Sparks are of varying size and orientation. The Sparks schools have already placed emphasis on the built environment with resources it has at its disposal: despite enormous challenges, the Sparks schools have taken steps to ensure that their classrooms reflect the learning that their students are engaged with. Each classroom takes on the distinct qualities of the students and their activities, and transform throughout the year based on the teacher’s guidance. This chapter will first describe classrooms at each site and their physical design as spaces of learning. It will then discuss the results of the survey and the current practice of teachers in the classroom with regards to their teaching of the natural landscape. Finally, this chapter will conclude with a series of suggested potential learning activities that can be used for classroom-based landscape education, particularly as preparation for activities that extend to the schoolyard and the city, and the corresponding important spatial changes that can be made to the classroom to complement the lesson.

**i. Current Classroom Physical Design**

Each of the classrooms at the different Sparks centers has one of three sizes:

| <b>School</b>       | <b>Classroom Type</b> | <b>Length (inches)</b> | <b>Width (inches)</b> | <b>Height (inches)</b> | <b>Floor Area (Sqft)</b> |
|---------------------|-----------------------|------------------------|-----------------------|------------------------|--------------------------|
| <b>Sparks One</b>   | Classroom A           | 134                    | 193.5                 | 97.5                   | 2160.75                  |
| <b>Sparks Two</b>   | Classroom B           | 133                    | 325                   | 98                     | 3602.08                  |
| <b>Sparks Three</b> | Classroom C           | 204                    | 123                   | 102.5                  | 2091.00                  |

a. Classroom Design: Opportunities and Constraints

*Windows:* All of these classrooms have at least one large window, which keeps the classrooms relatively well lit despite electricity shortages. These windows have the potential to provide an important visual link between the classroom and the outdoor environment.



**Classroom A:** A teacher reads “The Giving Tree” by Shel Silverstein to her five year old students.  
Credit: Sparks Academy in Kabul  
Credit: Sparks Academy in Kabul



**Classroom B:** *This classroom has a great deal of potential for landscape views and activities given that it has two sets of large windows.*  
*Credit: Sparks Academy in Kabul*

*Flexible spaces:* All of the classrooms across the various Sparks schools use easily moved materials as furniture and decorations – children primarily sit on cushions on the floor and all wall decorations are easily changed to reflect the lesson’s theme. Whiteboards and chairs are easily moved around the space as well. Programmatically, teachers are able to create thematic corners during class given the flexibility of the rooms, which is particularly important as it is not always feasible to create physical interventions to create more permanent thematic corners given the space restrictions in the classrooms. At the same time, Sparks classrooms are generous in terms of space per child in comparison to other educational programs in Kabul, which is a significant opportunity for creative activities.



**Classroom C**

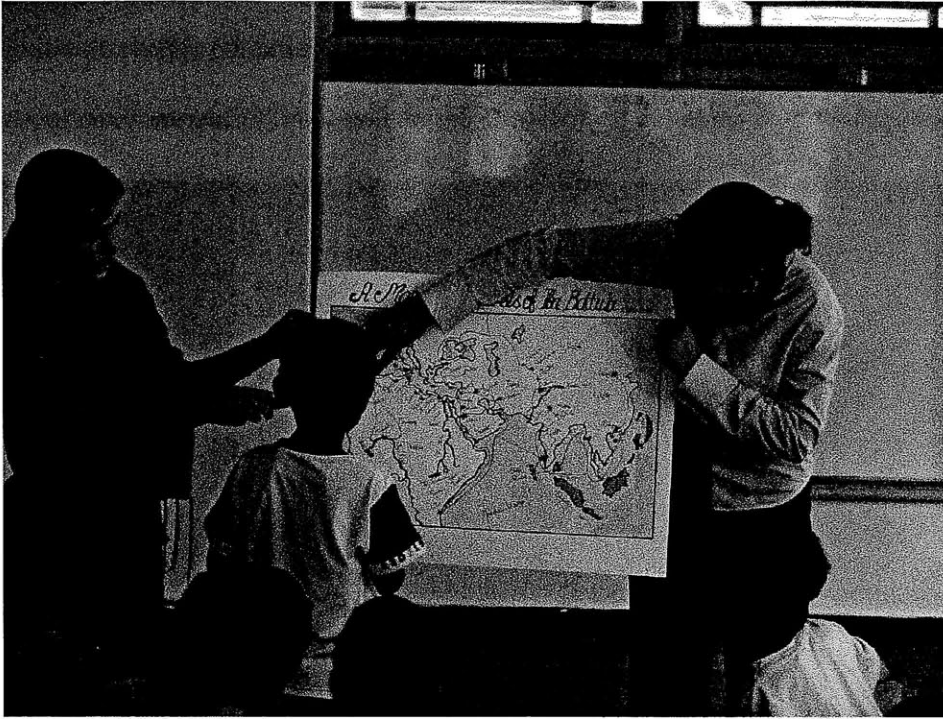
*The teachers in this classroom are working with their four year old students in various thematic corners where some children are working with one teacher on recognizing the English Alphabet, while another student is with a teacher at the whiteboard learning to spell.*  
 Credit: Sparks Academy in Kabul.

**Classroom B**

*The room is used as a single level space, but the use of a rug at one side of the classroom offers a visual cue of a difference for the children. This openness and flexibility leaves a great deal of potential for the creation of nook spaces, particularly near the windows.*  
 Credit: Sparks Academy in Kabul.



## ii. Current Teaching Practices



*In 2006 I conducted a lesson on Ibn Battuta, a famous traveler originally from Morocco. This lesson was conducted as part of a teacher training effort as well as for the benefit of the students at Sparks. Credit: Sparks Academy in Kabul.*

While the environment plays a strong role in offering visual and spatial cues to learning and exploration, a much more significant portion of content learned by students comes from the teacher: the teacher's activities, pedagogical style and chosen content. In order to better understand the current practices at all Sparks programs, a survey of 38 teachers was conducted: nine from Sparks One, 11 from Sparks Two, and 18 from Sparks Three. The discrepancy in the participation numbers from each program is due to the size of the program (i.e. Sparks One is a smaller program, and therefore has fewer teachers than Sparks Three).

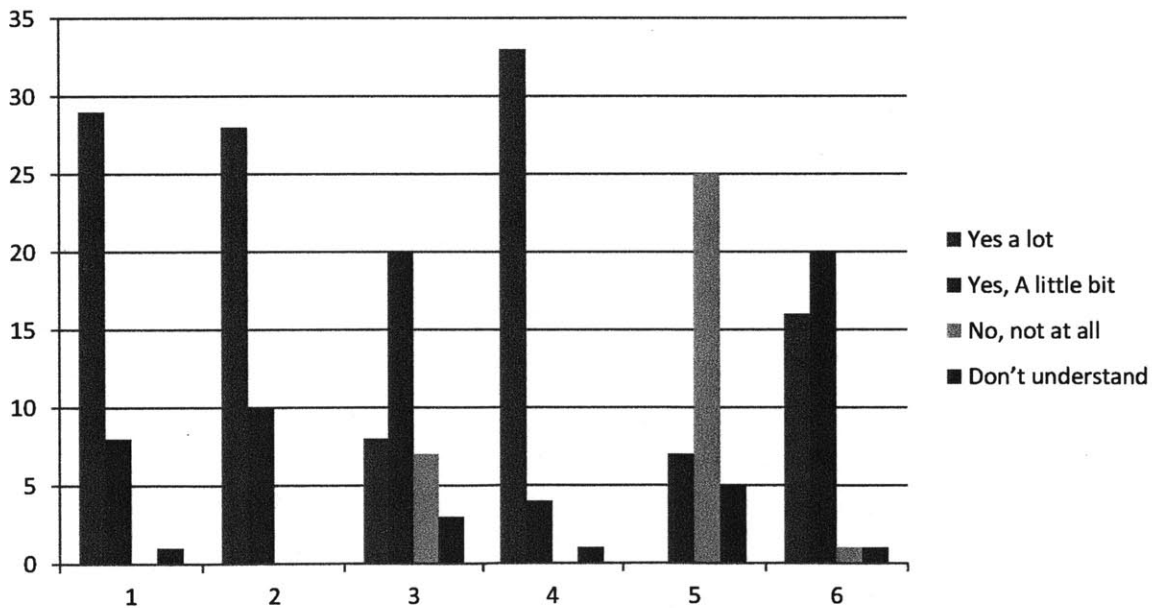
The survey questions and methods are outlined in Chapter Three of this study.

Part one of the survey deals with questions of current pedagogical practice, including content, resources used, and assessment strategies.

Content

The teachers were asked about the content of their verbal discussions in class in relation to the cultural and natural landscape of Afghanistan. Six categories of environmental and cultural landscape were selected: natural environment, how plants grow, care for animals, seasons, important people in Afghan history, and local cultural traditions in Kabul. The results are shown in the table and graph below:

|  | Yes a lot | Yes, A little bit | No, not at all | Don't understand |
|--|-----------|-------------------|----------------|------------------|
| <b>Natural environment?</b>                | 29        | 8                 | 0              | 1                |
| <b>How plants grow?</b>                    | 28        | 10                | 0              | 0                |
| <b>Care for animals?</b>                   | 8         | 20                | 7              | 3                |
| <b>Seasons?</b>                            | 33        | 4                 | 0              | 1                |
| <b>Important people in Afghan history?</b> | 0         | 7                 | 25             | 5                |
| <b>Local cultural traditions in Kabul?</b> | 16        | 20                | 1              | 1                |



The categories were chosen in particular to identify the six primary areas of interest of this research study. Recognizing that a significant part of Afghanistan's history has had deep

connections with the natural landscape, either by the necessity of civilizations trying to survive in the challenging environmental conditions of much of the country, or in magnificent feats of human endeavor (most famously recently, perhaps, in the form of the Buddha statues carved into the mountains of Bamiyan). Culture and environment are therefore deeply connected when considering the landscape of Afghanistan, and are, as a result, important to link through learning experiences for the young in Afghanistan.

This survey results are somewhat surprising in that the null hypothesis is that there is a constant amount of teaching for each subject area. That the content at Sparks is strong in the natural landscape content (“the natural environment”, “how plants grow”, and “seasons”), is promising. These categories were relatively flexible and were left to teachers to interpret as they would like to. However, due to the need to translate the survey into Dari, the level of flexibility that English provides was not always appropriate. For example, the “natural environment” was translated to simply “the environment”. Overwhelmingly, however, teachers responded that the environment, how plants grow, and seasons figured heavily into their teaching content. What is surprising is that teaching the children to care for animals was far less frequent than other topics about the environment, plants and seasons. The discrepancy between teaching about “cultural traditions of Kabul” and “important people in Afghan history” is also important to note. The challenge in identifying this content for “important people in Afghan history” potentially lies in the often polarizing role that such people often play in the current political context, depending on their ethnicity, actions, or other factors. This does not mean that the lessons should not be taught, but that a high level of sensitivity, particularly given the young age of the children, should be exercised when dealing with these delicate, and potentially divisive, matters.

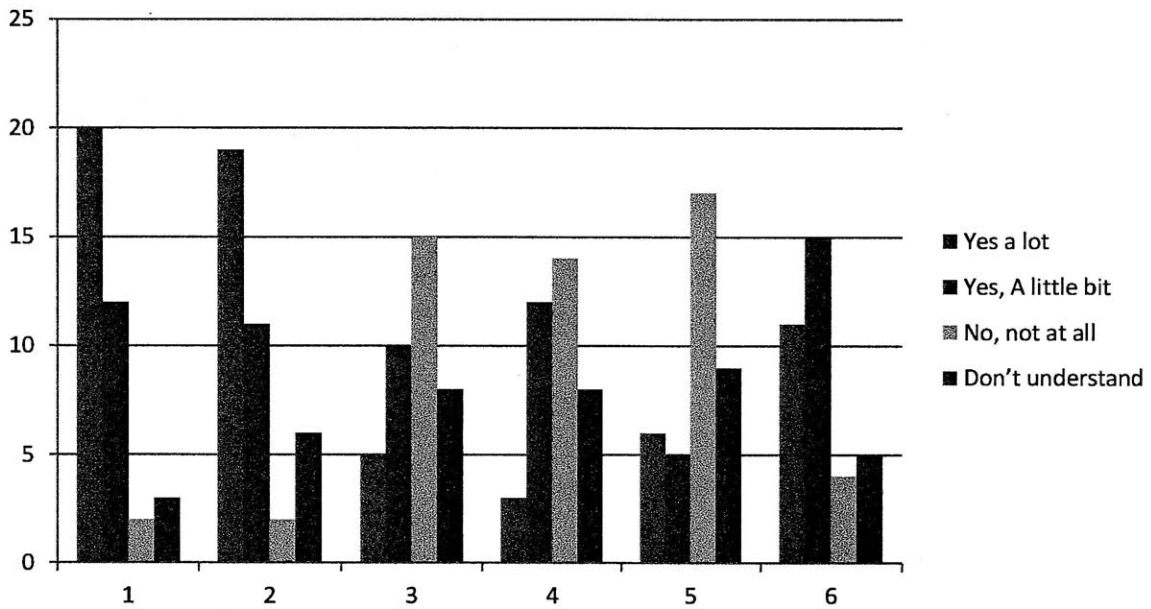
## Resources

The teachers were asked about the resources they use in their lessons, specifically books and other learning resources (including embroidered cloths, knitted dolls and murals) made in Sparks. The significance of the locally produced resource over a resource purchased from elsewhere is that the content developed at Sparks is culturally relevant. Children's books and resources that are developed from Afghan culture and history are not readily available in Afghanistan (or, indeed, internationally), and therefore the locally produced resources act as a response to this vacuum. Locally produced resources also provide an important potential for linking to landscape education if they do not already; such resources can be easily designed and made.

The content areas of these resources were identified to be: plants, animals, streams, mountains, cities and gardens. These categories were chosen for their inherent natural landscape elements, as well as their relevance to elements that the children would be more likely to see in Kabul or surrounding areas. Oceans, for example, are less immediately relevant to children in Kabul (though still important to learn about) however, the content for that lesson would use a different pedagogical approach than the scope of this study can encompass.

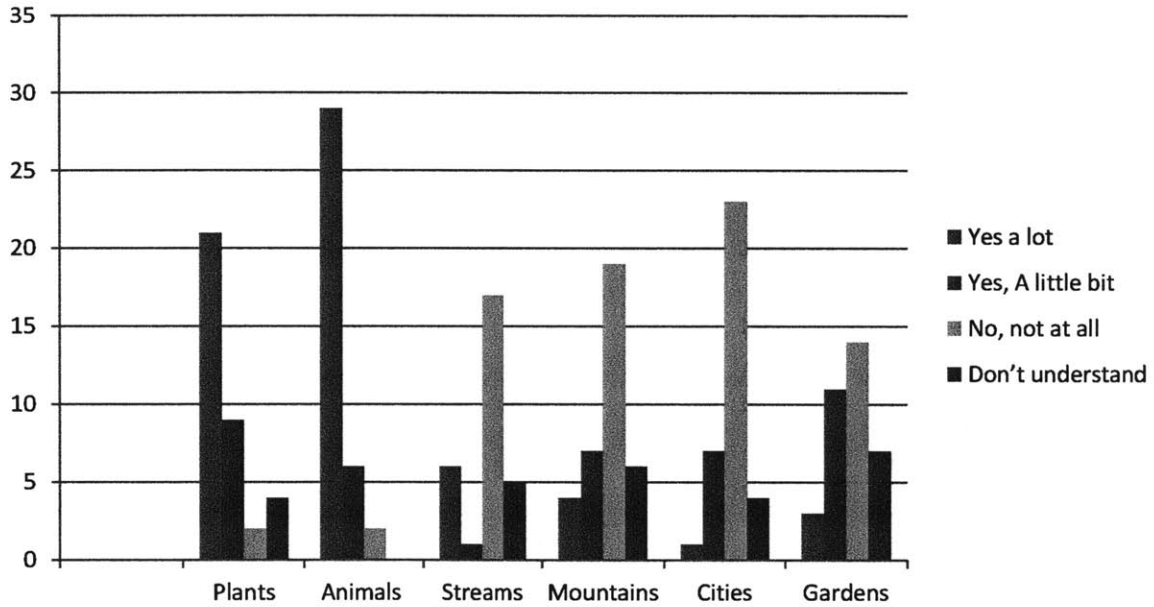
The following table and graph show results from the question of using books made at Sparks that have content that falls into the identified categories.

|                  | Yes a lot | Yes, A little bit | No, not at all | Don't understand |
|------------------|-----------|-------------------|----------------|------------------|
| <b>Plants</b>    | 20        | 12                | 2              | 3                |
| <b>Animals</b>   | 19        | 11                | 2              | 6                |
| <b>Streams</b>   | 5         | 10                | 15             | 8                |
| <b>Mountains</b> | 3         | 12                | 14             | 8                |
| <b>Cities</b>    | 6         | 5                 | 17             | 9                |
| <b>Gardens</b>   | 11        | 15                | 4              | 5                |



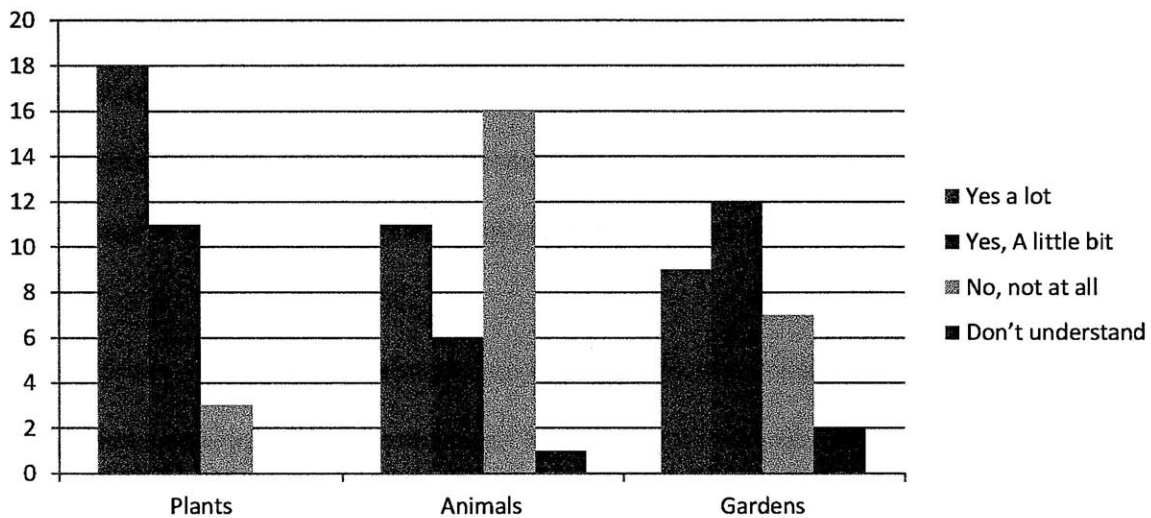
The following table and graph show results from the question of using other resources (excluding books) made at Sparks that have content that falls into the identified categories.

| Do you teach using resources made by teachers at sparks? | Yes a lot | Yes, A little bit | No, not at all | Don't understand |
|--|-----------|-------------------|----------------|------------------|
| Plants   | 21        | 9                 | 2              | 4                |
| Animals  | 29        | 6                 | 2              | 0                |
| Streams  | 6         | 1                 | 17             | 5                |
| Mountains  | 4         | 7                 | 19             | 6                |
| Cities   | 1         | 7                 | 23             | 4                |
| Gardens  | 3         | 11                | 14             | 7                |



The following table and graph show results from the question of using live resources (rather than depictions of these resources): plants, animals and gardens. This could involve having children interacting with an actual plant, animal or being in a garden.

|                | Yes a lot | Yes, A little bit | No, not at all | Don't understand |
|----------------|-----------|-------------------|----------------|------------------|
| <b>Plants</b>  | 18        | 11                | 3              | 0                |
| <b>Animals</b> | 11        | 6                 | 16             | 1                |
| <b>Gardens</b> | 9         | 12                | 7              | 2                |



The results from the survey in this context show that resources involving plants are extremely prevalent in books, other resources and as live plants that children interact with in the classroom. Animals are equally ubiquitous in books and other resources, though less frequently interacted with as live creatures. Gardens seem to be moderately engaged with, likely in a cursory way in both books and in life, but rarely depicted in alternative resources. Consistently streams, mountains and cities were underrepresented in books and other resources, which is not surprising, given these subjects are not conventionally incorporated into lessons. These results provide important insights into how landscape education at Sparks can be enhanced and improved.

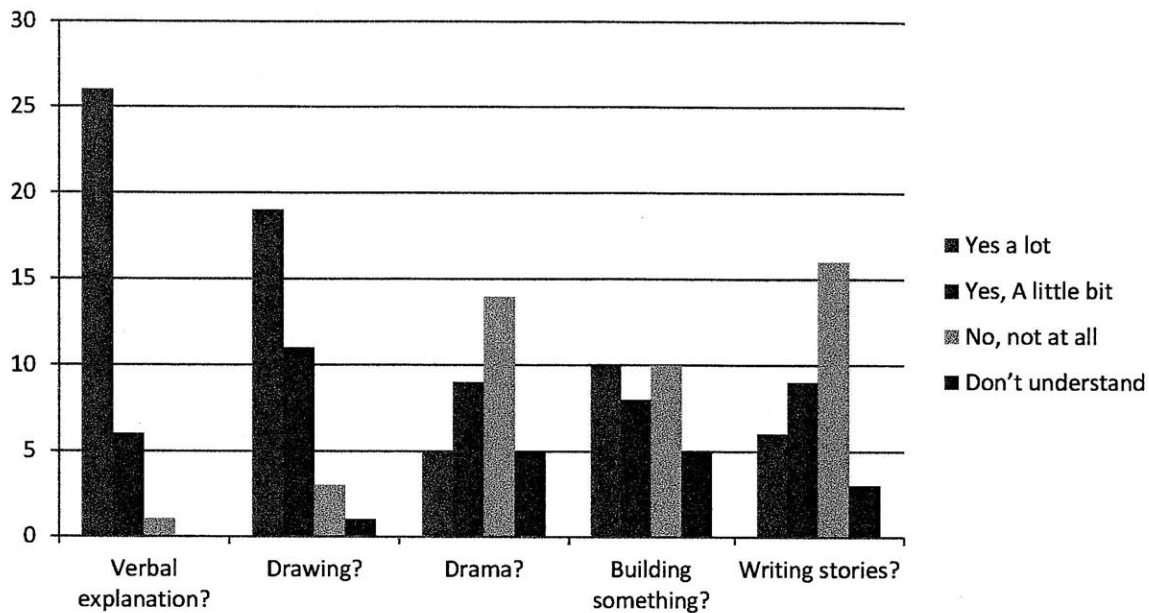
## Assessment

Children are taught not only through their teacher's pedagogical style, but also through the methods of assessment the teachers use.<sup>1</sup> This list is not exhaustive by any means; however, given the technological limitations in Afghanistan, these five possible visible learning strategies were identified as the most probable and appropriate for the Afghan context. The following table and graph show the results from the question of current practice in assessment tools used by teachers at Sparks.

| <b>Do you have students show their learning through:</b> | Yes a lot | Yes, A little bit | No, not at all | Don't understand |
|--|-----------|-------------------|----------------|------------------|
| Verbal explanation?                                      | 26        | 6                 | 1              | 0                |
| Drawing?   | 19        | 11                | 3              | 1                |
| Drama?   | 5         | 9                 | 14             | 5                |
| Building something?                                      | 10        | 8                 | 10             | 5                |
| Writing stories?   | 6         | 9                 | 16             | 3                |

---

<sup>1</sup> As a result, several creative based assessment models, based on the approaches developed by Project Zero's *Making Learning Visible* research group. This group proposes that children should be able to see and demonstrate their own learning through creative methods of sharing their knowledge and making it visible to themselves, their teachers, their parents and their community. These methods include many forms of creative work, specifically: verbal explanation, drawing, theater, building or creating objects and writing creative stories.



Writing stories is one of the least utilized assessment strategies, likely because many of the children are still learning to write. It is clear that verbal explanation plays an important role, which also is indicative of teaching style; involving much question and answer-style conversations. There is potential here to integrate drama, construction and creative storytelling into the classroom assessment schemes. Creative approaches to verbal explanation and drawing as methods of assessment can also be suggested.

### iii. The Classroom: Lessons

As described in the methods in Chapter Three, the lessons at Sparks are modeled (though not strict to follow) the International Baccalaureate Primary Years Programme (IB-PYP) planner. The suggested educational component developed for the classroom, the schoolyard, and the city are all linked under one single unit, with introductory work happening in the classroom that prepares students for learning in the schoolyard, and then for learning in Bagh-e-Babur and finally back to the classroom.

**Planner: Babur – A man and his legacy**

|                                       |  |
|---------------------------------------|--|
| <p><b>Transdisciplinary Theme</b></p> | <p>Sharing the planet: Inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationship within and between them; access to equal opportunities;</p>   |
| <p><b>Central Idea</b></p>            | <p>People and Landscape influence each other</p>   |
| <p><b>Lines of inquiry</b></p>        | <ul style="list-style-type: none"> <li>• My landscape</li> <li>• Babur’s landscape</li> </ul>  |
| <p><b>Teacher Questions</b></p>       | <ul style="list-style-type: none"> <li>• What is landscape?</li> <li>• Where do we play?</li> <li>• How does landscape impact us?</li> <li>• How do we impact landscape?</li> <li>• What are our responsibilities in impacting landscape?</li> </ul>   |
| <p><b>Key Concepts</b></p>            | <ul style="list-style-type: none"> <li>• <u>Connection</u>: <i>How is it connected to other things?</i> The understanding that we live in a world of interacting systems in which the actions of any individual element affect others.</li> <li>• <u>Perspective</u>: <i>What are the points of view?</i> The understanding that knowledge is moderated by perspectives; different perspectives lead to different interpretations, understandings and findings; perspectives may be individual, group, cultural or disciplinary.</li> <li>• <u>Responsibility</u>: the understanding that we are not passive observers of events but that we can make and must make choices and that, by doing things so, we can make a difference.</li> </ul> |

|   |   |
|---|---|
| <p><b>Deliverables</b></p>                        | <p>6. Group: children will design and transform classroom into a “paper garden”</p> <p>7. Individual: children will plant and care for flowers</p> <p>8. Individual: children will write and illustrate a story from the perspective of a plant, animal or part of their landscape</p> <p>9. Group: children will collectively write and perform a play about Babur and his connection to peace and landscapes.</p> <p>10. Small group: children will make a map of their landscape</p>   |
| <p><b>Formative Assessment: The Classroom</b></p> | <p>16. Questions: each child will be asked to come up with a question about growing plants that they can pose to the local expert gardener.</p> <p>17. Painting flower boxes: elements they use to decorate the box.</p> <p>18. Participation in the perspective game: rubric to establish if children are able to consider different perspectives from their own</p> <p>19. Initial stage of map: rubric of observed elements in their environment: what do they currently notice? Rubric of behaviors: how do they work together in small groups?</p> <p>20. Connections made following the story of Babur.</p> |
| <p><b>Summative Assessment</b></p>                | <p>6. Use of elements incorporated into discussions when designing the classroom-as-garden.</p> <p>7. Consistency in effort in caring for plant.</p> <p>8. Engagement in writing and illustrating their own story, ability to</p>   |

|  |   |
|--|---|
|  | <p>demonstrate effort in considering the story from another's perspective.</p> <p>9. Participation in play about Babur.</p> <p>10. Final map (following additions included after schoolyard and Bagh-e-Babur visit)</p> |
|--|---|

(International Baccalaureate Organization, 2011)

### Classroom activities

Each of the five deliverables described above will be scaffolded for children in the classroom, the schoolyard and the city. The classroom will be the space in which ideas are introduced, while the schoolyard and the city will be opportunities for children to delve into further detail and experimentation with ideas that they can then bring back to the classroom in their culminating projects.

#### 1. Introduction to Babur: Five days of stories

The children should be introduced to Babur first by asking what they already know. As a class, have the children share what they already know about Babur, his life, and his legacy. The teacher should record these ideas (regardless of their accuracy) on a large piece of paper that can then be posted up in the classroom. The teacher can then tell the students that they will learn a little bit about Babur today and over the next five days of class in this order:

| Day   | Topic                              |
|-------|------------------------------------|
| One   | Babur as a child                   |
| Two   | Important people in Babur's Life   |
| Three | Babur and the Natural Landscape    |
| Four  | Babur and the Arts                 |
| Five  | Babur's Legacy: Humayun and Beyond |

In order to create these anecdotes, teachers can use excerpts from the *Baburnama* that reflect the themes of the story.

After each story is read, ask the children what they learned about Babur, and give them thirty minutes to illustrate their understanding of Babur from that day. Ask them to also connect ideas about Babur's life to their own. For example, when discussing important people in Babur's life, be sure to ask the children to talk about and draw the important people in their own lives.

## 2. Developing Creative Questions:

Before meeting the local gardener, children can be introduced to ideas of plant growth, care for animals and general cycles of the natural environment through stories and images.

Teachers should also provide an opportunity for children to start thinking about questions they might have for a gardener and local expert. This activity is tailored from Project Zero's Visible Thinking:

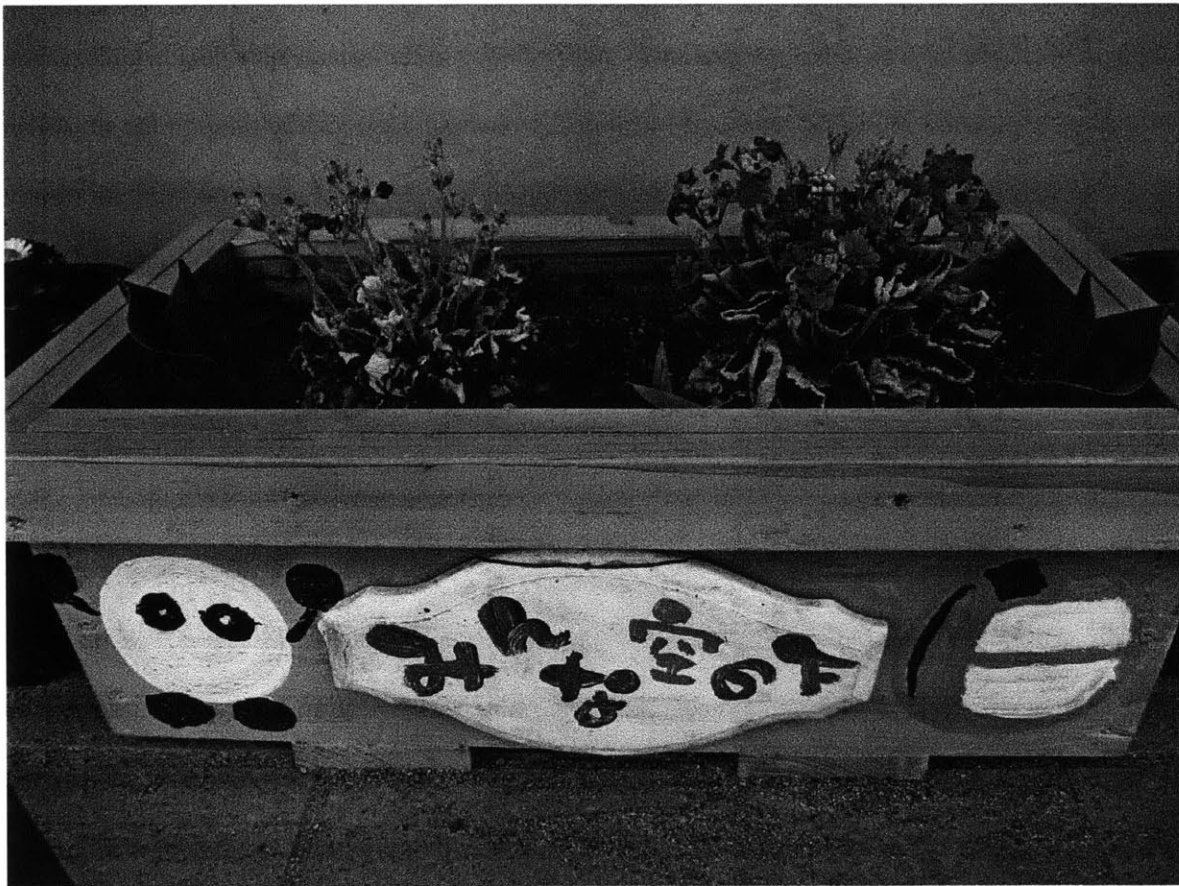
Teachers can bring in a potted plant and have children brainstorm a list of questions about it as a group. Pick an everyday object or topic and brainstorm a list of questions about it. The teacher should record these questions on a large piece of paper that can be displayed on the wall after the activity. The teacher should then, with the class, look over the list and transform some of the questions into questions that challenge the imagination. Do this by transforming questions along the lines of:

- I. What would it be like if...
- II. How would it be different if...
- III. Suppose that ...
- IV. What would change if ...

V. How would it look differently if ...

3. Painting flower boxes

This idea is drawn from an example seen in Minami Sanriku, Japan in March. Give the children each a paintbrush and a wooden flower box. The teacher should do a short demonstration of how to paint on the boxes. The children should be asked to decorate the flowerbox with elements that represent themselves, which could include: their family, their home, something that is important to them, something that they enjoy doing.





#### 4. Circle of Viewpoints Routine

This routine is another thinking routine adapted from Project Zero's Visible Thinking research. Teachers should select an object, for example a mountain. As a group, students should brainstorm different perspectives. The teacher should record these on a large piece of paper that can be displayed for students. Each student should then be asked to complete each of the following sentences:

- i. I am thinking of ... *the topic*... from the point of view of ... the viewpoint the child selected.
- ii. I think... *the child should describe the topic from his or her viewpoint*.

- iii. A question I have from this viewpoint is... *the child should ask a question from the viewpoint he or she has adopted.*

The teacher should then summarize several of the ideas heard in class that day and the different viewpoints. The teacher should then ask the children:

- i. What new ideas do you have about the topic that you didn't have before?
- ii. What new questions do you have?

The teacher should then use these questions to develop future lessons or opportunities for children to explore their interests to answer these questions.

## 5. Mapping

Introduce children to the idea of a map. What does it mean to map something? What can be mapped? What cannot be mapped? Show the children different types of maps, and ask them what is similar about them and what is different. What does each map show? Some examples of maps that could be used in the classroom are included in the Appendix.

### iv. **Built Environment Adaptations**

The clear success of the Sparks classrooms with regards to physical design is that they are flexible rooms that allow for the quick creation of new spaces without the need for extensive or expensive interventions. This idea can be enhanced by using several low-cost, temporary designs that can be easily set up and moved, but can transform the classroom into a space of imagination and creativity, and particularly in this context, can provide opportunities to think about the landscape that children are growing up in. Given the space limitations in the classrooms, these interventions would need to be very easily removed so that there is adequate space for parents to come into the classroom as well. Therefore, while the Sparks programs remain in these facilities,

it may be enough to use a variety of colours and textures for the floor (through rugs) and cushions.



## Conclusions

The current classroom setting is ideally designed to be flexible. Although the classrooms are simply designed, they are used creatively and in a way that maximizes the utility of the limited space available. The space inside the classroom, however, is not the only space available to the teachers to educate the children. The next chapter explores the potential of using the spaces immediately surrounding the school, called here “the schoolyard”, for teaching young children.

## **VI. THE SCHOOLYARD**



*Children arrive to Sparks through the paved schoolyard in March 2012.  
Credit: Sparks Academy in Kabul*

Understanding that play in the outdoor environment is important for children at any age, but having a space that is safe for exploration is particularly important in the early years, the schoolyard becomes an ideal and daily visited space that children can begin to connect with their environment safely. The schoolyards at Sparks can be categorized in two ways: two of the programs have paved courtyard space, while the third program has a small soil lot in addition to a courtyard that can be used by Sparks to develop an outdoor learning space. This potential has not yet been realized. This chapter will look at the outdoor spaces available near each of the Sparks programs. It will then explore the current views of teachers at Sparks about neighboring outdoor spaces, and identify spaces of opportunity for enhancing natural landscape education in the outdoor vicinity of the school. Finally, a series of lessons for the schoolyard will be suggested to extend initial lessons suggested for the classroom in the previous chapter, as well as to scaffold and prepare children for the next stage of this proposed unit: the city.

#### **i. Current Schoolyard Physical Design**

There are two outdoor typologies at Sparks: Sparks One and Two have a concrete path and small courtyards space between the gate and the school with limited additional space. Two of these spaces are also shared with religious community centers, and are all in rented facilities which leaves limited opportunities for fixed built environment interventions, but temporary uses (children learning outdoors or temporary physical interventions) have potential and if proposed as temporary interventions, could be an important testing ground for a school community's receptiveness to extending learning from the classroom to the outdoors. Sparks Three has a plot of garden space that is currently filled in with dirt and has the following measurements:

| Width 1 (m) | Width 2 (m) | Length 1 (m) | Length 2 (m) |
|-------------|-------------|--------------|--------------|
| 10.10       | 15          | 24.5         | 27.7         |

This space is currently filled with dirt and has a women’s toilet at one end that is being moved to another space in the adjacent garden.

**a. Schoolyard Design: Opportunities and Constraints**

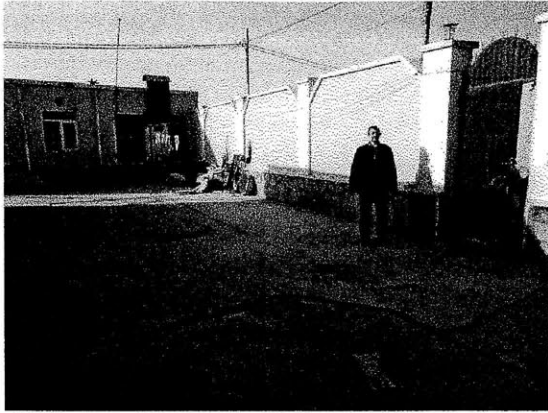
*High walls:* All three programs are enclosed with high walls, as is the custom generally in Kabul. These walls have an important purpose to provide privacy and a sense of security to those inside, but have the unfortunate consequence (in the context of this research) of limiting views of the wider environment, particularly for small children. However, precedents and ideas from Minami Sanriku in Japan, as well as those from indoor spaces at Sparks, can be potentially used to make this space a more creative and colorful space for young children.



*Current conditions at Sparks One.  
Credit: Sparks Academy in Kabul.*



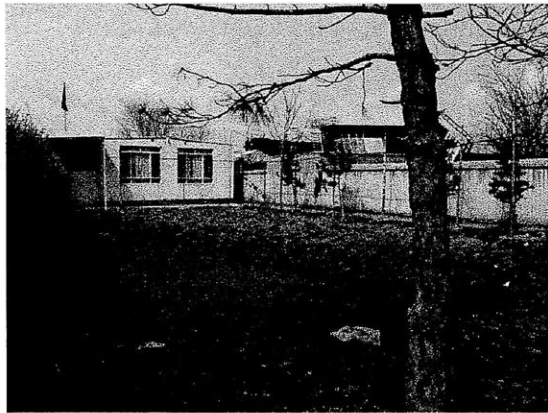
*Current conditions at Sparks One.  
Credit: Sparks Academy in Kabul*



*Current conditions at Sparks Two.  
Credit: Sparks Academy in Kabul.*



*Current conditions at Sparks Two.  
Credit: Sparks Academy in Kabul.*



*Current conditions at Sparks Three.  
Credit: Sparks Academy in Kabul.*



*Current conditions at Sparks Three.  
Credit: Sparks Academy in Kabul.*



*Potential inspiration: Sparks already uses indoor spaces for artistic and learning engagements. Similar ideas can be replicated in the more public schoolyard, as a means of educating the community as well as engaging children in a different space.*

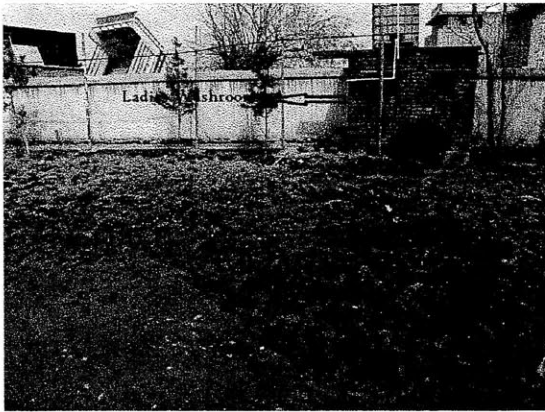
*Credit: Sparks Academy in Kabul.*



*An example of outdoor murals from Minami Sanriku, Japan.*

*Credit: Samira Thomas*

*Open space:* There is adequate space at all Sparks sites for a class of children to learn outside. However, the space at Sparks Three is currently not programmed and is simply a space filled with dirt. This will require an intervention of some sort before it is useable (or the intervention could involve the children). At the moment a proposal had been put forward by a private telecommunications company that is looking to conduct charity work around Kabul to put cement and false grass over this space and create a small field for young boys to play soccer. Sparks has petitioned that, given the proximity of the site to the school (it is directly adjacent to the school) and the current location of the women's toilets, this space could be better used for educational purposes and as one of few spaces that are ideally suited for women and children in the neighbourhood, it should not be repurposed to target young men. The elders from this community have accepted this and have halted plans to build the soccer field.



*Views of the open space behind Sparks that has been repurposed as a learning space instead of as a soccer field. Credit: Sparks Academy in Kabul.*

*Alleys and Local Roads:* The surrounding environment of the Sparks programs are all relatively poorly paved and the streets are regularly flooded in the winter as the snow melts and during any heavy rains, making access to the schools a significant challenge. In one location, at Sparks Two, where this was a significant problem, donations to Sparks were used to partially fund a road

improvement project, which was conducted by Sparks Scholars in partnership with local community members, who contributed the remainder of the funds. Anecdotal information during interviews with teachers at Sparks Two suggest that this road has created an improved attendance record during the winter months this year. Similar projects are planned for the other Sparks programs



*Road cementing project conducted by Sparks Scholars and community members to improve the road conditions to Sparks in order to help students continue to attend even during the winter months. Credit: Sparks Academy in Kabul.*

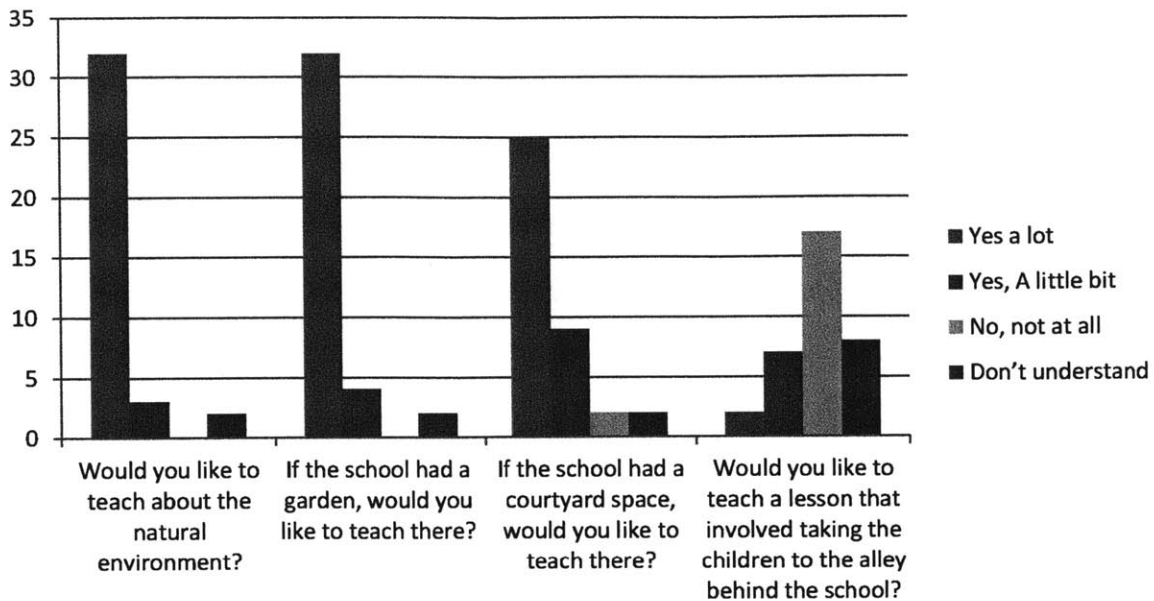
**ii. Stepping outside of the classroom**

The schoolyard becomes the first opportunity for education in the outdoor environment for children at Sparks. This space is an immediate transformation from the classroom as children move from a highly controlled space to one that is, while still enclosed, provides a sense of connection to the larger environment than an indoor setting would.

### Immediate Schoolyard

The teachers were asked if they do not currently teach about the natural environment, if that is a topic they would be interested to include in their lesson planning. Under the premise that they would like to teach about the natural environment, the teachers were offered three outdoor options for immediately available locations that they might be able to teach: a school garden, a paved courtyard space, and the alley behind the school. The following table and graph show the results from the survey:

|  | Yes a lot | Yes, A little bit | No, not at all | Don't understand |
|--|-----------|-------------------|----------------|------------------|
| Would you like to teach about the natural environment?   | 32        | 3                 | 0              | 2                |
| If the school had a garden, would you like to teach there?   | 32        | 4                 | 0              | 2                |
| If the school had a courtyard space, would you like to teach there?                                | 25        | 9                 | 2              | 2                |
| Would you like to teach a lesson that involved taking the children to the alley behind the school? | 2         | 7                 | 17             | 8                |



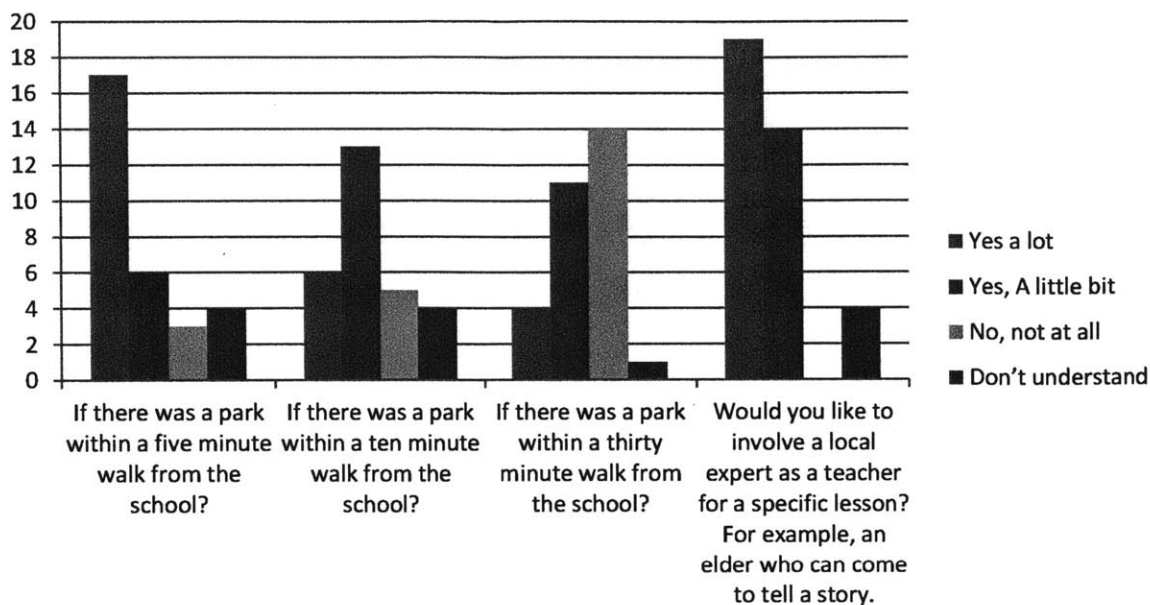
These results indicate that with regards to content and space, teachers at Sparks are overwhelmingly in favour of teaching about and in the natural landscape/environment. A few teachers were less excited about the courtyard spaces as opposed to gardens, but largely teaching in an enclosed and easily controlled space of the school was received favourably. However, alley spaces were unacceptable to most teachers. As was elaborated in interviews, alleys in Kabul are often dirty, unpaved, with potholes and septic waste that poses health hazards to children and adults alike. They are also considered public space, where it is generally socially unacceptable for women to spend concentrated amounts of time. As most of the teachers at Sparks are women, and given the incredible risks associated with children spending time in these spaces, it is appropriate that teachers are reluctant to take children to the alleys. This, however, does not mean that children don't spend time playing in these spaces when they are unsupervised by Sparks teachers. There is an opportunity in this unit to integrate a lesson of safety in play for the young children so they are able to identify and avoid potential hazards in their environment.

### Moving away from the School

The teachers were asked the possible distances they would be willing to take children away from the school in order to take them to a garden or park. This is used to gauge the likelihood of teachers taking students to a local destination. All three Sparks programs are located in densely populated areas with limited green park space within thirty minute walking distance. The teachers were also asked about their receptiveness to a local expert coming to the school to teach the children about his or her work. This would serve the purpose of drawing potential learning opportunities into the school, rather than necessitating children to go out into the community.

The following table and graph show the results of this survey:

| <b>Would you take the children to a park that was</b>  | <b>Yes a lot</b> | <b>Yes, A little bit</b> | <b>No, not at all</b> | <b>Don't understand</b> |
|--|------------------|--------------------------|-----------------------|-------------------------|
| If there was a park within a five minute walk from the school?   | 17               | 6                        | 3                     | 4                       |
| If there was a park within a ten minute walk from the school?  | 6                | 13                       | 5                     | 4                       |
| If there was a park within a thirty minute walk from the school?   | 4                | 11                       | 14                    | 1                       |
| Would you like to involve a local expert as a teacher for a specific lesson? For example, an elder who can come to tell a story. | 19               | 14                       | 0                     | 4                       |



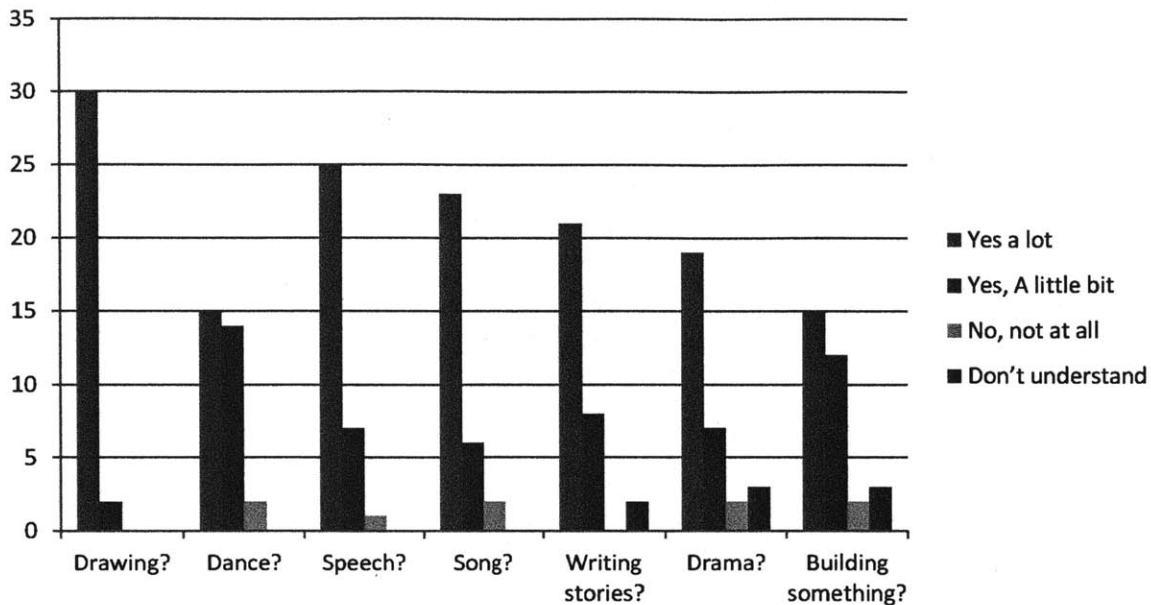
From a planning perspective, these results pose an important point about linking garden spaces to schools: teachers are very keen to teach outdoors, but become less enthusiastic as travel time increases. A majority would be keen to take their class within a five minute walk, but the number that support such field trips falls dramatically (from 17 to six) when travel time rises from five to ten minutes. When travel time rises to thirty minutes 14 teachers would not even consider this an option. Following interviews with the teachers, travel to a garden again becomes a question of safety of both teachers and the students as most of the teachers at Sparks are women and are from the local community, and are usually only able to work at Sparks because it is local and does not require traveling outside of their immediate community. Several teachers also suggested during interviews that they would be less comfortable taking responsibility for young children in the city, and walking with them would be challenging with traffic and the general dangers of Kabul as a busy city. They suggested that having a car that would take the children and teachers to a park would be preferably, and that they would need to ensure that the park itself is clean and

safe before feeling comfortable taking the children there. One teacher suggested early on that the garden should be a historic garden rather than any garden in particular.

### Assessment

In order to gauge teacher receptiveness to a variety of assessment strategies, teachers were asked about methods of assessment that they might use. Teachers were given options that they likely use now as well as those that are not currently in practice. The options were selected based on their feasibility in the context of Kabul and Sparks as it stands now. This means that strategies that involve technology, for example, were not suggested, although teachers may be very receptive to these options. Given the current infrastructural potential at Sparks, these options could be used in the future, but only after a significant financial and infrastructural investment. The following table and graph demonstrate the teacher reception of a variety of assessment methods:

| <b>Would you like students to show what they have learned through</b> | Yes a lot | Yes, A little bit | No, not at all | Don't understand |
|---|-----------|-------------------|----------------|------------------|
| Drawing?  | 30        | 2                 | 0              | 0                |
| Dance?  | 15        | 14                | 2              | 0                |
| Speech?   | 25        | 7                 | 1              | 0                |
| Song?   | 23        | 6                 | 2              | 0                |
| Writing stories?  | 21        | 8                 | 0              | 2                |
| Drama?  | 19        | 7                 | 2              | 3                |
| Building something?   | 15        | 12                | 2              | 3                |



“Dance” and “Building Something” were the least well received by the teachers, though still widely supported. Following an interview, it became clear that one possible reason behind this slightly reduced enthusiasm stems from the discomfort in how to actualize these specific assessment strategies. Providing teachers with tools on assessment strategies for dance and building may bring teachers that are less receptive to these techniques on board. Similarly, drawing is a well-recognized and clear technique to the teachers at Sparks, and is currently used frequently, while songs, writing stories, and drama are less often used and less familiar to the teachers. Few teachers were opposed to any strategies, which indicates a general openness to new teaching and assessment methods, which was echoed in all teacher interviews, as teachers responded to questions about assessment strategies with their own questions about how these methods can be implemented, and requesting more information about strategies so they can improve their own teaching. This response is incredibly encouraging and provides an important opportunity for innovation.



*Dance is already used at Sparks as a tool to draw mothers into the school space and develop a sense of comfort for children and parents alike. There is, therefore, an opportunity to use this as a tool for assessment, as well. Credit: Sparks Academy in Kabul*

### iii. The Schoolyard: Lesson

Following the original unit planned developed in the previous chapter, this set of lessons and activities will continue and build upon the lessons from the classroom. It will also provide an opportunity to prepare the children for the upcoming lesson in the city, at Bagh-e-Babur.

#### **Planner: Babur – A man and his legacy**

|                                |   |
|--------------------------------|---|
| <b>Transdisciplinary Theme</b> | Sharing the planet: Inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationship within and between them; access to equal opportunities; |
| <b>Central Idea</b>            | People and Landscape influence each other   |
| <b>Lines of inquiry</b>        | <ul style="list-style-type: none"> <li>• My landscape</li> <li>• Babur’s landscape</li> </ul>   |
| <b>Teacher Questions</b>       | <ul style="list-style-type: none"> <li>• What is landscape?</li> <li>• Where do we play?</li> <li>• How does landscape impact us?</li> </ul>  |

|  |  |
|--|--|
|  | <ul style="list-style-type: none"> <li>• How do we impact landscape?</li> <li>• What are our responsibilities in impacting landscape?</li> </ul>   |
| <b>Key Concepts</b>                        | <ul style="list-style-type: none"> <li>• <u>Connection</u>: <i>How is it connected to other things?</i> The understanding that we live in a world of interacting systems in which the actions of any individual element affect others.</li> <li>• <u>Perspective</u>: <i>What are the points of view?</i> The understanding that knowledge is moderated by perspectives; different perspectives lead to different interpretations, understandings and findings; perspectives may be individual, group, cultural or disciplinary.</li> <li>• <u>Responsibility</u>: the understanding that we are not passive observers of events but that we can make and must make choices and that, by doing things so, we can make a difference.</li> </ul> |
| <b>Deliverables</b>                        | <ol style="list-style-type: none"> <li>11. Group: children will design and transform classroom into a “paper garden”</li> <li>12. Individual: children will plant and care for flowers</li> <li>13. Individual: children will write and illustrate a story from the perspective of a plant, animal or part of their landscape</li> <li>14. Group: children will collectively write and perform a play about Babur and his connection to peace and landscapes.</li> <li>15. Small group: children will make a map of their landscape</li> </ol>   |
| <b>Formative Assessment: The Classroom</b> | <ol style="list-style-type: none"> <li>21. Questions: each child will be asked to come up with a question about growing plants that they can pose to the local expert gardener.</li> </ol>   |

|  |   |
|--|---|
|  | <p>22. Painting flower boxes: elements they use to decorate the box.</p> <p>23. Participation in the perspective game: rubric to establish if children are able to consider different perspectives from their own</p> <p>24. Initial stage of map: rubric of observed elements in their environment: what do they currently notice? Rubric of behaviors: how do they work together in small groups?</p> <p>25. Connections made following the story of Babur.</p>   |
| <p><b>Formative<br/>Assessment: The<br/>Schoolyard</b></p> | <p>26. Questions: children should ask questions based on the gardening expert's presentation.</p> <p>27. Planting in flower boxes: following the discussion, the gardening expert can walk the children through planting their seeds in the flowerboxes they decorated.</p> <p>28. Dancing: teachers can play an outdoor dance game "Doomoma Dancing" which translates to "Landscape Dancing".</p> <p>29. Map of garden: in order to have children better understand mapping and observe their outdoor space more carefully, they will be asked to explore the space and then get into groups of three and map their courtyard or garden.</p> <p>30. Connections made following the story of Babur.</p> |
| <p><b>Formative<br/>Assessment: The<br/>City</b></p>       | <p>31. Questions: each child will be asked to come up with a question about Bagh-e-Babur that they will pose to their teacher, or, if possible, a guide who works at Bagh-e-Babur.</p>  |

|                                    |  |
|------------------------------------|--|
|                                    | <p>32. Exploring Water: children can look at the different water channels in the garden and try to understand how they work.</p> <p>33. Participation in the perspective game: what do the children see in the garden and how can we tell a story with that perspective?</p> <p>34. Bagh-e-Babur Map: what do the children notice? How does this space connect with their school, their home and their community?</p> <p>35. Babur and his garden: what do the children understand about Babur's life now that they have visited his garden?</p> |
| <p><b>Summative Assessment</b></p> | <p>11. Use of elements incorporated into discussions when designing the classroom-as-garden.</p> <p>12. Consistency in effort in caring for plant.</p> <p>13. Engagement in writing and illustrating their own story, ability to demonstrate effort in considering the story from another's perspective.</p> <p>14. Participation in play about Babur.</p> <p>15. Final map (following additions included after schoolyard and Bagh-e-Babur visit)</p>   |

Schoolyard Activities

1. Discussion with a Gardening Expert

The gardening expert is from one of the Sparks communities. In the interview, he was asked what he would teach children if he could teach them anything about gardening. He responded

that the names of the flowers, how to plant them, and how to care for them would be his priorities. I was also interested to understand how he became interested in gardening. An excerpt from the interview explains the origins of his work today:

*“I was 13 years old when Sayed Shah Nasir asked me and some other young boys if we want to work for King Zahir Shah. King Zahir Shah has requested from Sayed Shah Nasir that he wanted someone to guard his house for him that was honest and trustworthy. This was the house where the king and his family were spending their weekends... There was a Bulgarian man who was gardening for the king at that time. He trained me on how to plant, take care of the plants and other skills that I know today.”*

His story is particularly interesting as it was during his younger years that he was drawn into the field and now has the potential to share that experience with children who are younger than he was when he first became interested in gardening.

Children will be given the opportunity to ask the questions they developed in the classroom as part of their *Creative Questions* routine, as well as any questions that emerge during the gardening expert’s presentation.

## 2. Planting with an Expert

Following the discussion and questions with the gardening expert, he will walk the children through how to plant their seeds and teach them how to care for their plant. Periodically throughout the weeks that follow, the children should be given time to go outside and care for their plants as they were taught by the expert. These flowerboxes can then be placed outside

along the wall of the school, as was seen in Minami Sanriku:



*A compact use of space for growing plants in Minami Sanriku, Japan. Credit: Samira Thomas.*

### 3. Doornoma Dancing

The children should be introduced to this new game, which is called Doornoma Dancing. Using a drum, the teacher will play a beat in the courtyard or garden to which children can dance.

Intermittently, the teacher can call out different elements (specific animals, or ‘rivers!’ or ‘mountains!’) which children will then have to dance out. When the teacher stops playing the drum, the children will have to freeze in their position and the teacher will ask the children to individually show what their action was to the rest of the class and explain why they chose this action.

### 4. Mapping our school!

Children will be asked to start thinking about mapping their school. They should be asked to focus on the garden/courtyard space and should work in teams of three children. They should explore the courtyard/garden space as a team and try to think about how they want to illustrate their map, and what they think is important to show on their map. Give the children some time to complete their school map together.



*Mapping activities were used in the Reggio Emilia classroom with three year old children. These activities are well documented and can provide inspiration for activities in the Sparks Classroom.*

*Credit: Project Zero Visible Thinking*

## 5. Connecting to Babur

Children should be asked to start thinking about how Babur must have felt. With the information they learned about Babur, what do the children now think about his life? Has their perspective changed at all now that they have learned about planting? What do they think now about his life in the mountains? How would they start to think about presenting the story of Babur's life in the garden/courtyard at their school?

### iv. Built Environment Adaptations

There are many potential interventions that could happen at the various Sparks locations. More permanent solutions could include:

#### a. Garden Development

Transforming paved /dirt filled space into planted space that uses climate appropriate trees and plants. This could be done with the help of the gardening expert who expressed interest in volunteering his time for such and activity. He has also offered to lead a team of community members who are also interested in planting the space.

b. Murals and Mosaics

Engaging the community, and particularly the children in Sparks, in artistic projects that connect with the content they are learning can be an important link between community, education and the space of the school. Murals can be used, as was seen in Minami Sanriku, and would create a benefit to the high walls surrounding the schoolyard.

c. Outdoor Storytelling Stage

A small, covered, stage area could be constructed where performances could be presented to the community. It can also provide a raised space for children to play, tell stories and participate in art activities. The roof can provide shade in the summer and protection from rain in the winter. An adaptation of an example from Minami Sanriku that is contextually designed can be easily imagined for Sparks Three in particular. This could also provide an important link for resource making by fathers, who are currently less engaged with resource development for the school as they are primarily sewn and stitched items made by mothers. This kind of an activity could take an existing practice at Sparks and extend it to the next step of community engagement.



*An outdoor stage space in  
the school garden in  
Minami Sanriku.*

*Credit: Samira Thomas.*

### *Conclusions*

One of the exciting elements that came out of this research study was the inspiration to teachers at Sparks to start thinking about landscape and human resources in their community to teach the children. Because the land at one of the Sparks centers was gifted to the school to become an outdoor learning space, the teachers decided to enlist the help of students and the gardening expert to transform the space. This demonstrated not only a great excitement on the part of the teachers to start engaging new pedagogies and spaces of learning into their curriculum, but also a great adaptability to new ideas.



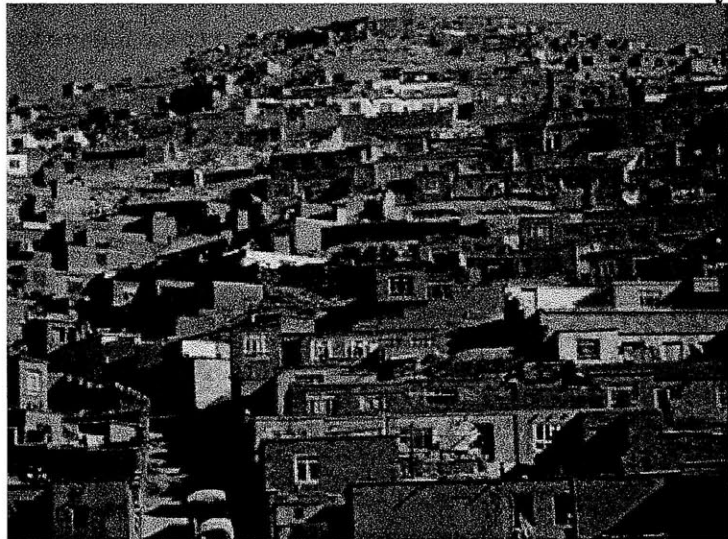
*The gardening expert and a teacher from Sparks work with students to plant flowers in the newly created Sparks garden. Credit: Sparks Academy in Kabul.*



*Teaching begins to happen outdoors now that a new space has been created.*

The initiative that the teachers at Sparks have shown is an incredibly positive sign when thinking about how to integrate an even more challenging environment like Bagh-e-Babur into their teaching routines. The space of the historic garden as a learning space will be explored in the next chapter.

**VII. The City**

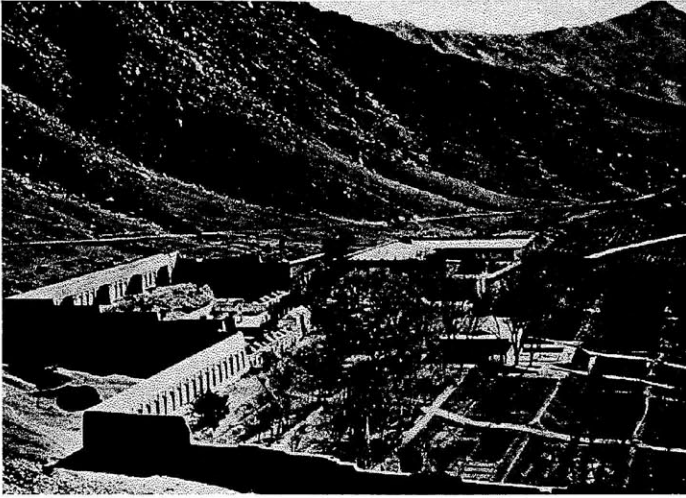


*Informal housing emerges all over the city of Kabul.  
Credit: RAWA*

Moving out and understanding the connection to the city is important as Kabul acts as the setting and context for the schoolyard and the classroom. Connecting the city to landscape education in the early years is a challenging task when so little of city is considered truly safe for young children to explore openly. One such space is Bagh-e-Babur, the historic garden built by Babur Shah, a Timurid king and father of the Mughal Empire. Babur was laid to rest in this garden. This chapter will focus on this garden as a potential site for landscape education in the early years. It will start with a description of the wider Kabul urban environment, a detailed description of Bagh-e-Babur, an analysis of the teacher responses to the questionnaire as it relates to the city and will then conclude with a suggested lesson that can be conducted at Bagh-e-Babur and follow up at school that can happen after the children are taken to Bagh-e-Babur.

**i. Kabul and Bagh-e-Babur: Current Physical Elements**

Kabul was historically a green city. Under Babur's rule, the city had over ten gardens similar to the current Bagh-e-Babur. Walking around Kabul today, however, the city's green history seems to be a distant memory. There are few trees in urban areas, and stresses on the housing market have led to overcrowding and limited vegetation development. Indeed, the need for housing has at times been cause for the destruction of vegetated lands. Much of the green space that did once exist in the city was destroyed over the thirty years of war, particularly in the years that the Taliban controlled Kabul. As trees provided cover to militias attempting to wage war against the Taliban, entire orchards were razed to increase visibility for the Taliban against oncoming attacks. In many instances, trees in the city were also chopped down during the war as a result of fuel shortages. This was the case in Bagh-e-Babur, as is illustrated in the following historic images:



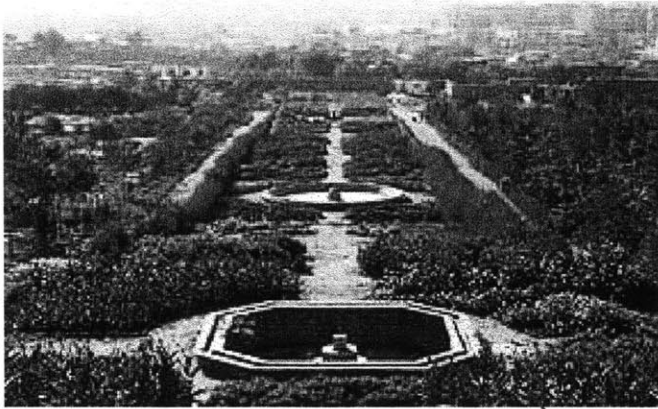
*Elevated view from northwest of the upper gardens circa 1916-1917, showing the Queen's Palace in the background, with the mosque (left) and pavilion (right) seen at center. Source: Niedermayer, Oskar von and Ernst Diez. 1924. *Afganistan*. Leipzig, K.W. Hiersemann at [www.archnet.org](http://www.archnet.org)*



*Elevated view of upper terraces from northwest, showing extent of damage prior to restoration, 1994. Source: Jolyon Leslie, Aga Khan Trust for Culture at [www.archnet.org](http://www.archnet.org)*



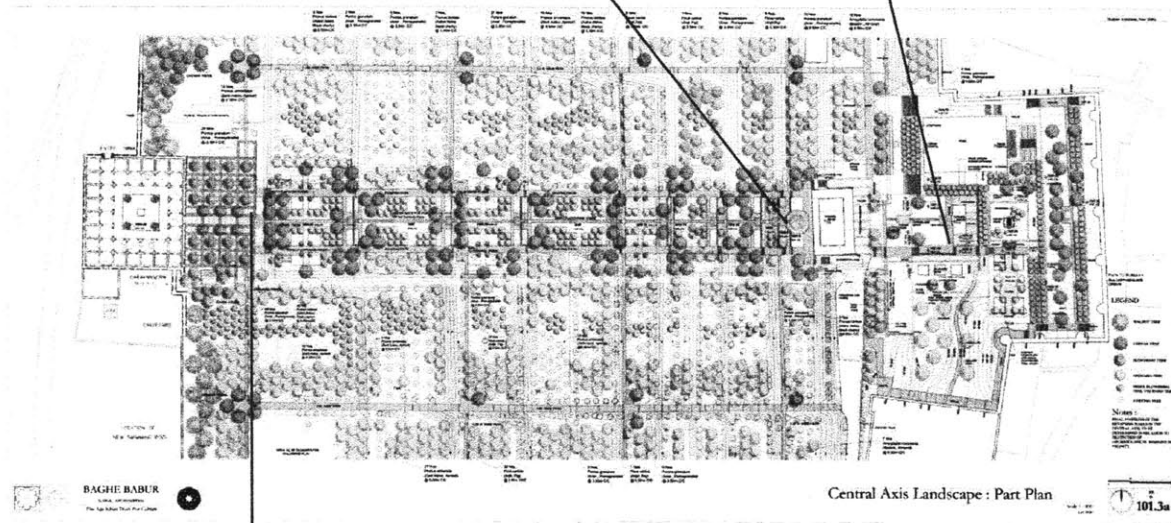
*Elevated view of upper terraces from northwest showing restoration progress, 2008. Source: Aga Khan Trust for Culture at [www.archnet.org](http://www.archnet.org)*



*View from the top of the Garden. Credit: archnet.org*



*Commemorative Tree  
Credit: Ameel Somani*



*Plan View of Bagh-e-Babur today. Credit: archnet.org*



*View from the bottom of the Garden.  
Credit: archnet.org*

Entering the garden today, visitors are greeted by richly diverse foliage, spacious and well planned terraces of plants, flowing water and intricately constructed walkways. It is designed as a walled, rectangular garden (approximately three hundred meters by four hundred and sixty meters) with fifteen orchard terraces that extend from the caravanserai to the opposite end of the garden to the west, where Babur's tomb is located. The central axis running the length of the garden contains symmetrical grids of shrubbery, parterres and a fountain between the two symmetrical paths. The restoration team has made an effort to use the space for a variety of indigenous and new types of vegetation, particularly fruit trees, which have been planted in different grids of the park (AKTC, 2004).

As visitors enter Bagh-e-Babur, they are greeted by the *caravanserai*, a Persian traditional form of lodging for travelers. The foundations of this caravanserai were uncovered during the restoration process in 2003, which were used as the foundation for the structure that stands today. The caravanserai today provides a space for economic activity in the park, with shops that



*Entrance to garden and caravanserai during a performance. Credit: archnet.org*

sell goods for tourists and local visitors alike. Since 2007, the courtyard of the caravanserai has served as a stage for local musicians and theatre troupes (AKTC, 2008).

Adjacent to the caravanserai is the newly relocated swimming pool. The garden's pool was originally built in the 1970s at the northwest end of the park, however the planning team felt that shifting the original site of the pool would allow for more space to be dedicated to the pool and associated recreational space, as well as provide the park, and the families which visit it, with more privacy from this area. The original site of the pool will be filled in and amalgamated with the foliage of the park (AKDN, 2004).



*A place of play – Bagh-e-Babur's pool. Credit: archnet.org*

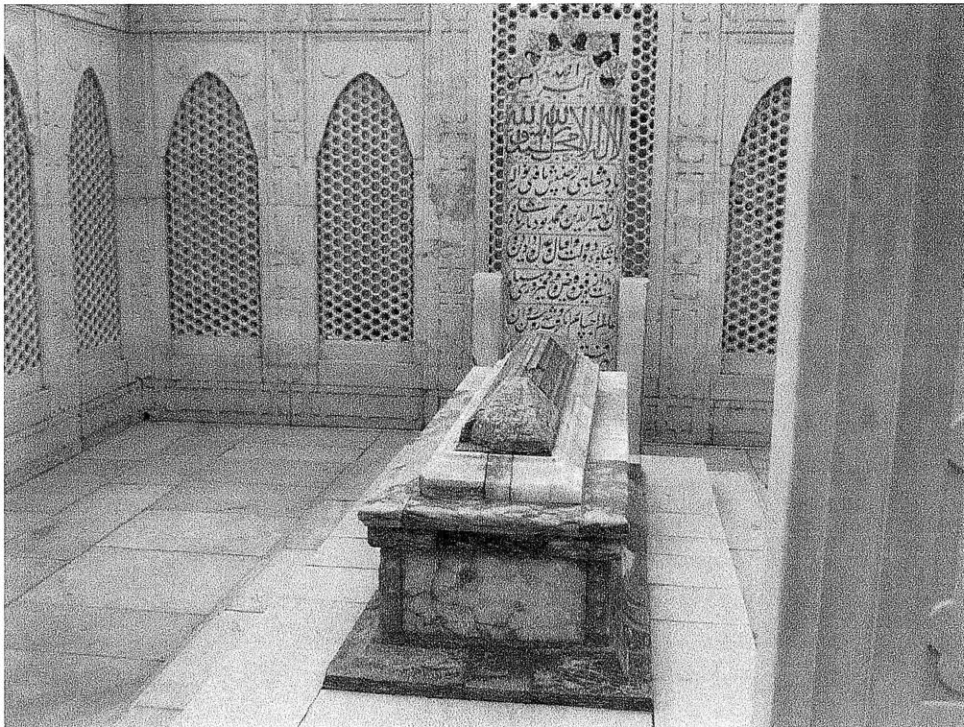
Babur's tomb, on the western side of the garden, has been restored with some modifications.

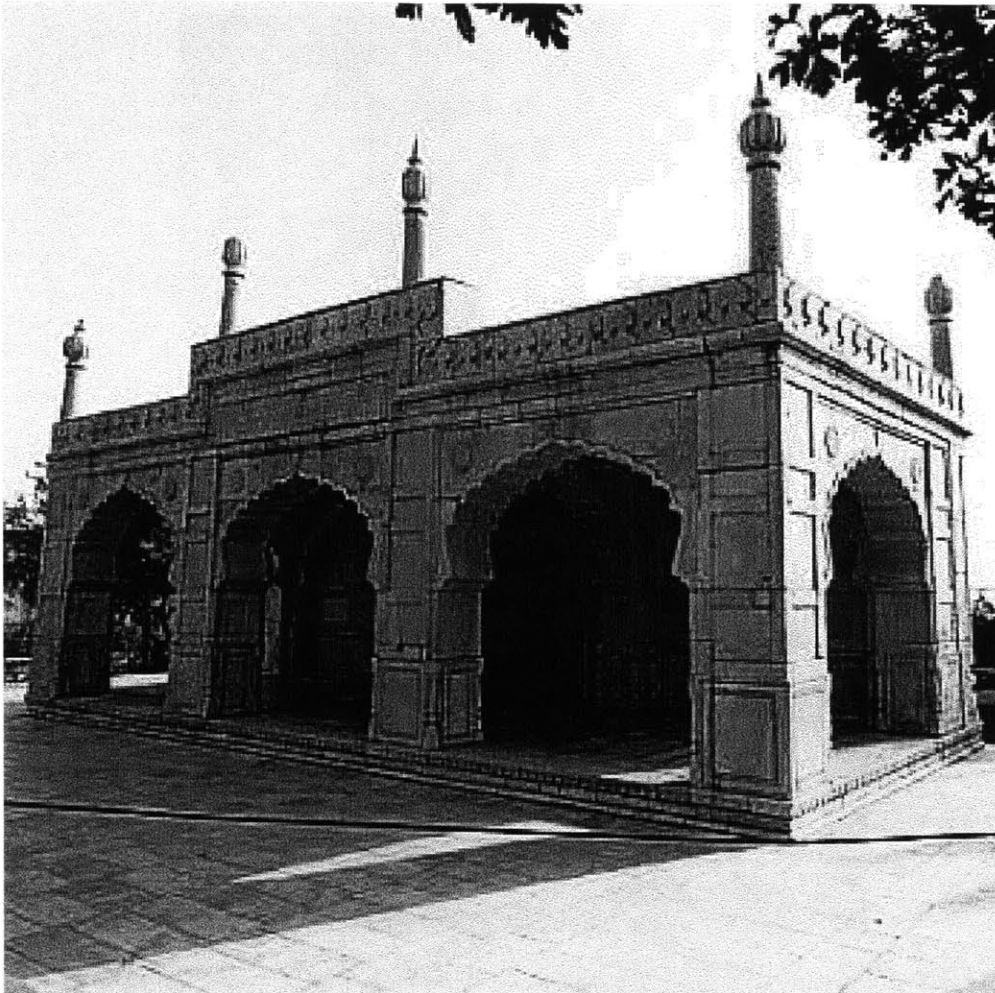
Although it remains a square structure, the roof that once covered the tomb has been removed, in accordance with the desire of Babur as expressed in his memoirs. Below the tomb, on the thirteenth terrace, is a mosque that was first constructed by Shah Jahan I, the fifth Mughal ruler following Babur (AKDN, 2004).



*Babur's Tomb Before and After Restoration.*

*Credit: archnet.org*





*Shah Jahan's Mosque. Credit: archnet.org*

The Garden Pavilion, located below the mosque, provides a reception hall for the garden. Constructed in the late nineteenth century, the pavilion suffered a great deal during the conflict in Kabul, particularly in a 1992 gun battle. As a result of the destruction, the reconstruction team has decided to maintain a 'natural monument' to the trauma suffered by the city and the specifically the park, by preserving the trunk of a large chinar tree that acts "as a reminder of the scale of the trees that died when irrigation was halted during recent conflicts." (AKTC, 2004).



*View of Commemorative Tree from Garden Pavillion. Credit: Ameen Somani.*

The Queen's Palace, constructed by Amir Abdur Rahman Khan in the late 1890s, is located adjacent to Babur's tomb and the mosque. Originally designed as a residential palace, this site is now host to a variety of different events, including recently a Central Asian rock concert (Afghan Youth Voices Festival, 2011).



*Central Asian rock artists perform at the Queen's Palace. Credit: Afghan Youth Voices Festival.*

Bagh-e-Babur is both a space, in which people can move and navigate, as well as a place, which encapsulates centuries of history, from Babur's time to the present. As a space, it is made up of parterres, waterways, symmetrical design and structures described in the background. It is through these spaces that a visitor navigates. However, as a place, the park takes on a much more important role: it provides a physical context for understanding history, social interaction and cultural discourse.

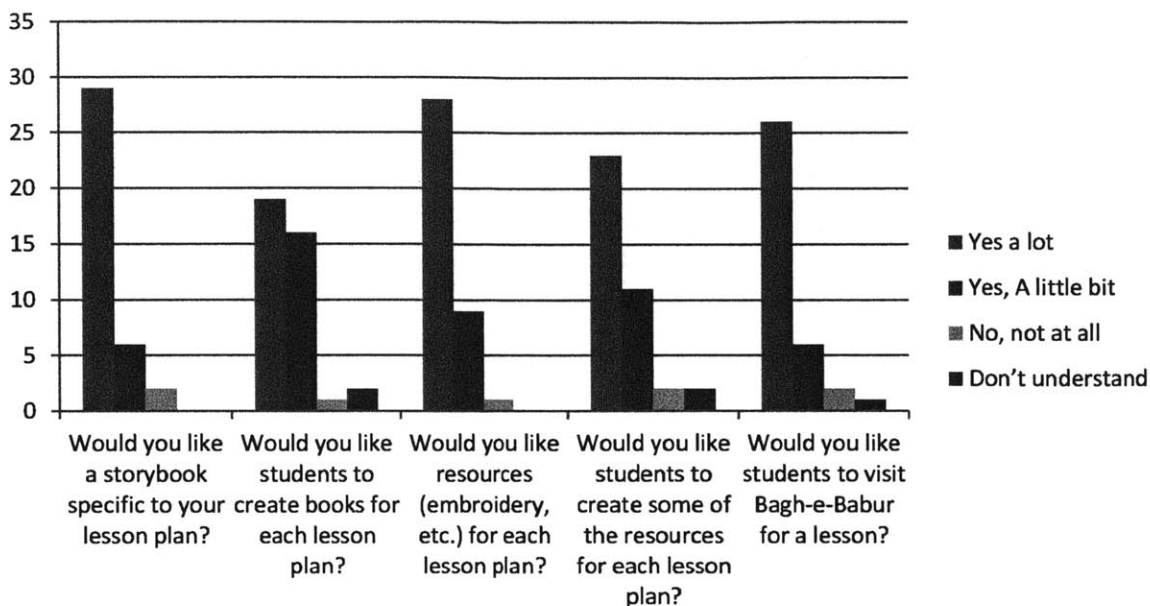
## **ii. Taking children into the City**

When Bagh-e-Babur specifically was brought up to the Sparks teachers, there was an overwhelming sense that children should be taken there, and if logistics such as parent supervision and transportation were taken care of, teachers were incredibly eager to do so. The questionnaire for this portion was looking at slightly more significant changes to current practice that teachers may consider if a visit to Bagh-e-Babur was possible.

### Student Participation

The philosophy of programs like Reggio Emilia and the Making Learning Visible group at Project Zero value the participation of children in the unit planning process. The idea of *emergent curriculum*, that is, a curriculum that is drawn first from children's interests and developed into a unit collaboratively by the teacher and the students, is one that is encouraged at Sparks, but is adapted to meet the challenges of schooling in Kabul. The following graph and table illustrate the responses of the teachers:

|  | Yes a lot | Yes, A little bit | No, not at all | Don't understand |
|--|-----------|-------------------|----------------|------------------|
| Would you like a storybook specific to your lesson plan?                             | 29        | 6                 | 2              | 0                |
| Would you like <b>students</b> to create books for each lesson plan?                 | 19        | 16                | 1              | 2                |
| Would you like resources (embroidery, etc.) for each lesson plan?                    | 28        | 9                 | 1              | 0                |
| Would you like <b>students</b> to create some of the resources for each lesson plan? | 23        | 11                | 2              | 2                |
| Would you like students to visit Bagh-e-Babur for a lesson?                          | 26        | 6                 | 2              | 1                |



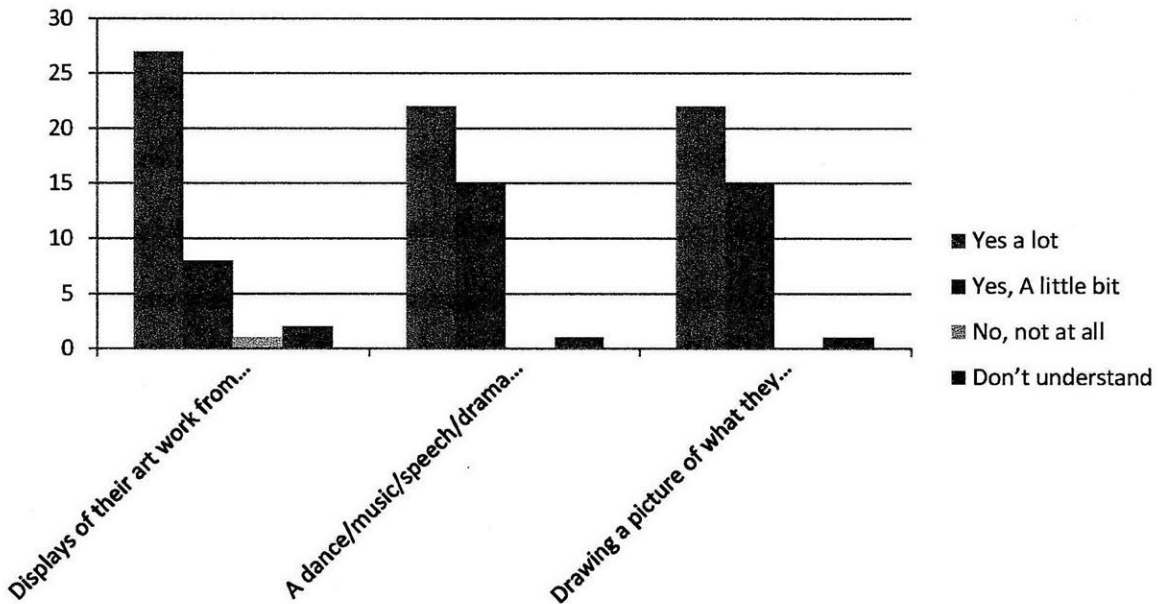
The teachers were generally excited about visiting Bagh-e-Babur, and having resources developed that were specific to their unit. The teachers were slightly less keen (though still receptive) to the idea of children participating in making those resources. For the most part, the response was positive, and in the interviews it was suggested that the teachers may feel that resource development with the younger age group would be too challenging as they cannot read and write. Providing tools and training in techniques for how children’s engagement in developing the unit’s resources could be carried out, particularly with children who are still developing literacy, could be helpful in bringing teachers fully on board with this idea.

#### Returning from Bagh-e-Babur

The teachers were asked about various activities that they might support after a visit to Bagh-e-Babur. These activities included various artistic demonstrations of what was learned and explored at Bagh-e-Babur that could be put on display for parents and community members in the schoolyard. The schoolyard was selected as the venue as it receives the majority of parent/community foot traffic, which could also be used as a way to make the children’s learning

clear to those parents who currently have not enrolled their children at Sparks. The following table and graph illustrate the teacher response:

| <b>If you had a garden at Sparks... In the Sparks garden, would you like students to show:</b> | Yes a lot | Yes, A little bit | No, not at all | Don't understand |
|--|-----------|-------------------|----------------|------------------|
| Displays of their art work from Bagh-e-Babur activities?                                       | 27        | 8                 | 1              | 2                |
| A dance/music/speech/drama concert that shows activities engaged with at Bagh-e-Babur?         | 22        | 15                | 0              | 1                |
| Drawing a picture of what they think a garden can look like at Sparks.                         | 22        | 15                | 0              | 1                |



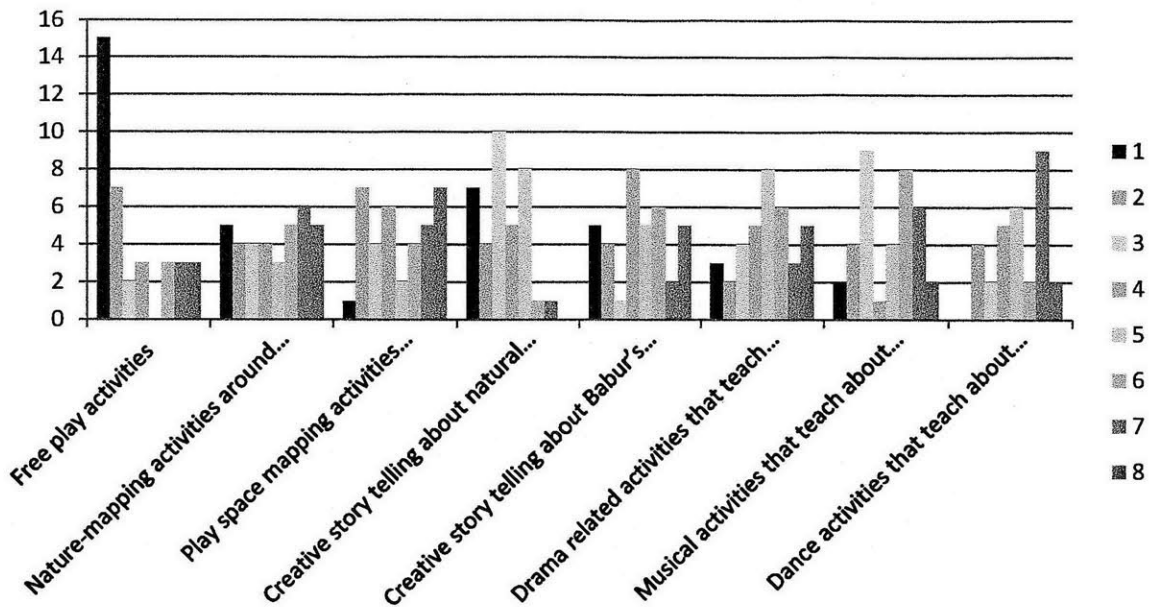
This shows that the teachers are generally very open to a variety of displays of how children engaged with Bagh-e-Babur once they return back to school. These displays provide an important link between the historic garden and the local outdoor space, between the learning that

happens in Bagh-e-Babur and the extension of that learning back to the Sparks schools and communities.

#### Activities at Bagh-e-Babur

To understand what teachers envisaged as being an important use of the children's time while at Bagh-e-Babur, a list of eight potential activities was given to the teachers who were then asked to rank these activities in their order of preference. The table below indicates the activities suggested, the rank and the number of teachers who selected that particular rank for each particular activity. A rank of one was given one point, and a rank of two was given two points, up to a rank of eight given eight points. The sum of all the points given to the activity provides the final ranking, with the lowest number of points going to the most favoured activity.

| <b>Activity</b>  | <b>Score</b> | <b>Rank (1 = most preferred activity)</b> |
|--|--------------|---|
| Free play activities   | 110          | 1   |
| Creative story telling about natural environment               | 118          | 2   |
| Dance activities that teach about the garden's spaces          | 155          | 3   |
| Creative story telling about Babur's life                      | 163          | 4   |
| Musical activities that teach about the natural environment    | 167          | 5   |
| Nature-mapping activities around the garden                    | 168          | 6   |
| Play space mapping activities around the garden                | 176          | 7   |
| Drama related activities that teach about the garden's history | 176          | 8   |



Free play was overwhelmingly selected as the most important or preferred activity for children, followed by: play space mapping; creative storytelling about the natural environment and Babur’s life; drama, musical, and dance activities that deal with various aspects of Bagh-e-Babur as an historic and landscaped garden. These views guide the lesson that is developed in the next section.

**iii. The city: Lessons**

Visiting Bagh-e-Babur following the lessons in the classroom and the schoolyard is intended to be an important and highly engaging experience for the children from Sparks. They will have understood something about Babur and his life, how plants grow and the life cycle of animals, looking at issues and objects from a variety of perspectives, and the purpose and style of maps, among many other lessons that overarch these topics. At Bagh-e-Babur, therefore, there is likely to be a great deal of excitement of being in an open and safe space for free play and exploration.

**Planner: Babur – A man and his legacy**

|                                       |  |
|---------------------------------------|--|
| <p><b>Transdisciplinary Theme</b></p> | <p>Sharing the planet: Inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationship within and between them; access to equal opportunities;</p>   |
| <p><b>Central Idea</b></p>            | <p>People and Landscape influence each other</p>   |
| <p><b>Lines of inquiry</b></p>        | <ul style="list-style-type: none"> <li>• My landscape</li> <li>• Babur’s landscape</li> </ul>  |
| <p><b>Teacher Questions</b></p>       | <ul style="list-style-type: none"> <li>• What is landscape?</li> <li>• Where do we play?</li> <li>• How does landscape impact us?</li> <li>• How do we impact landscape?</li> <li>• What are our responsibilities in impacting landscape?</li> </ul>   |
| <p><b>Key Concepts</b></p>            | <ul style="list-style-type: none"> <li>• <u>Connection</u>: <i>How is it connected to other things?</i> The understanding that we live in a world of interacting systems in which the actions of any individual element affect others.</li> <li>• <u>Perspective</u>: <i>What are the points of view?</i> The understanding that knowledge is moderated by perspectives; different perspectives lead to different interpretations, understandings and findings; perspectives may be individual, group, cultural or disciplinary.</li> <li>• <u>Responsibility</u>: the understanding that we are not passive observers of events but that we can make and must make choices and that, by doing things so, we can make a difference.</li> </ul> |

|  |   |
|--|---|
| <p><b>Deliverables</b></p>                         | <p>16. Group: children will design and transform classroom into a “paper garden”</p> <p>17. Individual: children will plant and care for flowers</p> <p>18. Individual: children will write and illustrate a story from the perspective of a plant, animal or part of their landscape</p> <p>19. Group: children will collectively write and perform a play about Babur and his connection to peace and landscapes.</p> <p>20. Small group: children will make a map of their landscape</p>   |
| <p><b>Formative Assessment: The Classroom</b></p>  | <p>36. Questions: each child will be asked to come up with a question about growing plants that they can pose to the local expert gardener.</p> <p>37. Painting flower boxes: elements they use to decorate the box.</p> <p>38. Participation in the perspective game: rubric to establish if children are able to consider different perspectives from their own</p> <p>39. Initial stage of map: rubric of observed elements in their environment: what do they currently notice? Rubric of behaviors: how do they work together in small groups?</p> <p>40. Connections made following the story of Babur.</p> |
| <p><b>Formative Assessment: The Schoolyard</b></p> | <p>41. Questions: children should ask questions based on the gardening expert’s presentation.</p> <p>42. Planting in flower boxes: following the discussion, the gardening expert can walk the children through planting their seeds in the</p>   |

|  |   |
|--|---|
|  | <p>flowerboxes they decorated.</p> <p>43. Dancing: teachers can play an outdoor dance game “Doornoma Dancing” which translates to “Landscape Dancing”.</p> <p>44. Map of garden: in order to have children better understand mapping and observe their outdoor space more carefully, they will be asked to explore the space and then get into groups of three and map their courtyard or garden.</p> <p>45. Connections made following the story of Babur.</p>   |
| <p><b>Formative<br/>Assessment: The<br/>City</b></p> | <p>46. Questions: each child will be asked to come up with a question about Bagh-e-Babur that they will pose to their teacher, or, if possible, a guide who works at Bagh-e-Babur.</p> <p>47. Exploring Water: children can look at the different water channels in the garden and try to understand how they work.</p> <p>48. Participation in the perspective game: what do the children see in the garden and how can we tell a story with that perspective?</p> <p>49. Bagh-e-Babur Map: what do the children notice? How does this space connect with their school, their home and their community?</p> <p>50. Babur and his garden: what do the children understand about Babur’s life now that they have visited his garden?</p> |
| <p><b>Summative<br/>Assessment</b></p>               | <p>16. Use of elements incorporated into discussions when designing the classroom-as-garden.</p> <p>17. Consistency in effort in caring for plant.</p>  |

|  |   |
|--|---|
|  | <p>18. Engagement in writing and illustrating their own story, ability to demonstrate effort in considering the story from another's perspective.</p> <p>19. Participation in play about Babur.</p> <p>20. Final map (following additions included after schoolyard and Bagh-e-Babur visit)</p> |
|--|---|

The City: Activities

Before getting on the bus to go to Bagh-e-Babur, instruct the children to observe the route and to identify elements they see that they might want to include on their map.

Upon arriving at Bagh-e-Babur, the children and chaperones will enter the garden near the Caravanserai on the western side of the garden. This is at the bottom of the garden steps, and so the children are confronted by a rising landscape in front of them.

1. Give the children time to engage in free play without any instructions or directions, except those that involve safety and supervision. Give them 25 minutes for free play and observe and record their behaviours and activities through photographs and anecdotes that can be put on display in the schoolyard.

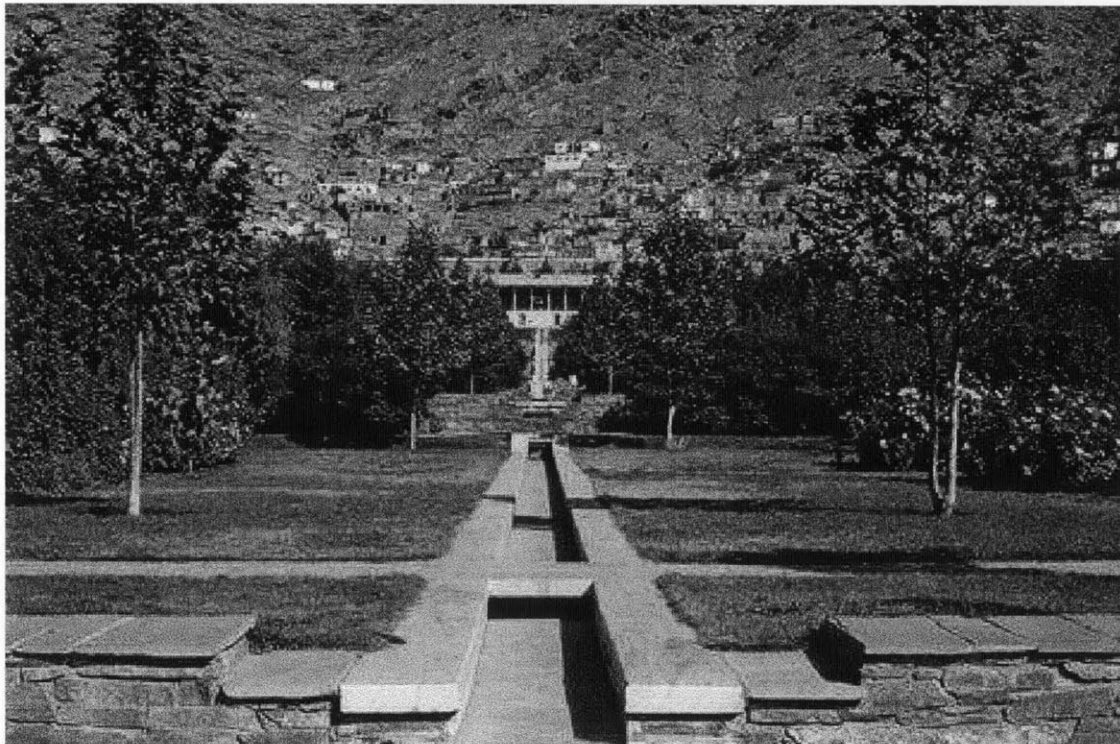


2.

*A child at Bagh-e-Babur. Credit: Sasha53, Panoramio.com*

3. Site A – Play: Base of Water Feature along Central Axis

*Site A: Base of the central axis water feature. Credit: archnet.org*



Bring the children together at the bottom of the water feature running the central axis (close to where they entered). Ask the children to engage in the *See, Think, Wonder* thinking routine. Use this conversation to ask children what they see from this angle. This may include various plants, animals and water channels. It may also include activities they observe in the site, and what kinds of activities they can envision for the site. This is an opportunity to introduce questions about why the garden is there and who built it.

4. Site B – Nature: Top of the Water Feature along the Central Axis

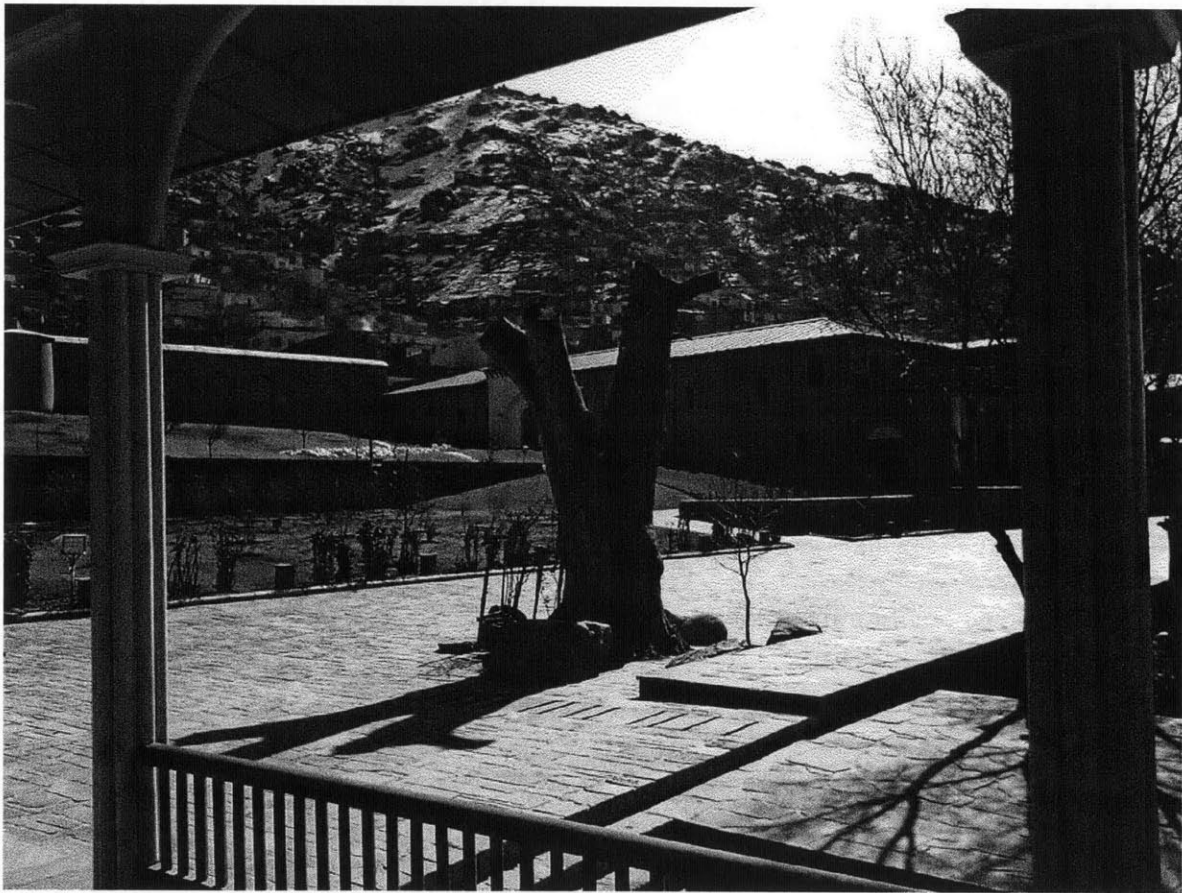


*Site B: Top of the central axis water feature.  
Credit: Sasha53, Panoramio.com*



Take the children to the top of the central axis water feature. Ask them again to engage in the *See, Think, Wonder* routine, this time from the higher perspective. During the routine, draw the children's attention to the structures around Site B and the natural environment they encounter. Look at this site in relation to Site A and engage the children in a discussion about what they see, think, and wonder, that may be different in relation to what they experienced in the first site. Which buildings and structures are on this side? Why are they here instead of at Site A?

5. Site C - Commemoration: Commemorative Tree



*Site C: Commemorative Tree*

Take the children to the old chinar tree preserved by the conservation team. This tree has bullet holes in it, and it is likely that this tree will provide the most direct connection to the war,

although the walls and buildings around the garden have remnants of the war as well, which children will likely notice. As the children at this site to focus on the tree as a part of nature, and engage with the *See, Think, Wonder* routine, specific to the tree. Ask: is this tree different or the same as the other trees? What is different about it? Why do you think it is that way? Write a story from the perspective of this tree and tell that story to the children here. Have them spend some time exploring the garden again before leaving, this time ask them to think about a variety of perspectives and choose one that they want to write as a story when they get back to Sparks.

#### 6. Mapping the garden

Give the children 30 minutes to go around the garden and think about what they would like to map. Ask them to observe the garden carefully as you walk between the three sites and think about how the three sites link to one another. Upon returning to Sparks, the children will draw a complete map of their landscape and their city, in the style that they choose.

#### 7. Babur's life and legacy

Following a discussion on Babur and his garden, the children will be asked to think about what else they would like to include in their performance about Babur's life and legacy. The teacher and students should brainstorm this together in the classroom and find a way to include these additions to the play. The final portion of this assignment is to practice and then eventually perform this play to the children's parents and community.



*Children at Sparks enjoy performing and wearing traditional clothes in March 2012. Credit: Sparks Academy in Kabul.*

### *Conclusions*

The amount of teacher engagement and excitement about teaching at Bagh-e-Babur, given the appropriate conditions of safety while traveling and while teaching at the garden, is very encouraging. With the right tools and some training in pedagogical approaches to teaching in different settings, the teachers at Sparks have the potential to make the role of Bagh-e-Babur extend from a space for cultural engagement, but also a place of important learning for the young of Kabul.

## VII. Conclusions



*Boys at Sparks Academy work together to plant a garden in April 2012.  
Credit: Sparks Academy in Kabul*

This thesis has explored teacher willingness to participate in integrating landscape into the early childhood curriculum in their school, the Sparks Academy in Kabul, Afghanistan. The concept of landscape was approached both as the *space* of learning as well as a topic of study. Given the immense challenges that Afghanistan is facing today in its education system, as well as the general political and social climate, it is to be expected that the school system of Afghanistan is prioritizing access. However, with the students that do attend school, the Ministry of Education in Afghanistan has found that literacy and numeracy have widely not been learned to an adequate standard. (MoE, 2004). Therefore, an approach to learning that moves beyond access and into the content and pedagogical style of teaching is imperative, particularly as the national curriculum is currently undergoing revision in the hopes of addressing the problem of students leaving the school system without meeting minimal standards of numeracy and literacy.

This thesis approaches education through the lens of landscape and the integration of landscapes into the curricular content. Historically, learning in Afghanistan was not limited to a classroom, and indeed, nowhere in the world is that the case. However, the engagement and learning that occurs in gardens or outdoor spaces in Kabul has widely been informal and experiential. This thesis demonstrates that a formal link between the classroom, the schoolyard, and the city in Kabul is not only possible, but is widely supported by teachers at the Sparks Academy in Kabul. Through interviews and surveys, teacher and community member opinions were collected in order to better understand the views of those who would be affected by changes in the curricular expectations. The findings widely suggested a sense of optimism and openness to new modes of teaching and learning that was somewhat unexpected at the onset of this research. Based on these observations and analysis, this thesis has identified four primary areas of immense potential:

teacher engagement, flexibility of spaces, curricular content, and drawing on community resources. Each of these themes is elaborated below:

### 1. Teacher Engagement

The level of teacher engagement and excitement about teaching and learning was a source of inspiration over the course of this research. In interviews and discussions, teachers were engaged with the content of this research – though I was interviewing them, they would frequently ask questions about how they might go about implementing ideas that were raised in the survey. They were so enthusiastic about the idea of engaging children in landscape education and connecting with the local gardening expert that they went ahead and started a landscaping project at Sparks Three in April, where teachers and children from various age groups went to the garden space and helped the gardener with planting and digging. A follow up survey is planned to understand the experience of the teachers and the gardening expert in conducting this lesson, and to understand the engagement of the children in this exercise.



*Children at the Sparks Academy Kabul engage in planting their garden with the help of the local gardening expert in April 2012. Following interviews with teachers for this research project, the teachers at Sparks were inspired to begin a landscape education module. Credit: Sparks Academy in Kabul*

## 2. Flexible spaces

The built environment at Sparks is also an important resource. Though there is slightly more space for children than in typical schools in Afghanistan, the space remains limited, which means that any built environment interventions must be carefully thought through. Sparks has responded to these challenges well by making resources that easily and temporarily transform the classroom. These resources also transform the teaching style - with some cases of teachings being drawn down onto the floor to work with the child in a collaborative way, while at other times they draw the children up to engage with resources on the walls or that the teacher is holding while standing.

There is an opportunity to extend the concepts of transformative spaces from the classroom to the schoolyard, in particular. At the time of this study, the schoolyard was not extensively used as the Sparks programs operate in shared spaces where communities gather, making it difficult to create permanent interventions. However, temporary interventions are entirely possible. Interventions that also engage the wider community or provide a common good for those who are not associated with Sparks visit the space, are possible, and could go a long way in providing public education and enhancing Sparks' outreach.



*Students work in different 'corners' of a Sparks classroom, enhanced by moveable rugs, cushions, seats, whiteboards and learning resources. Credit: Sparks Academy in Kabul.*

### 3. Drawing on Community Resources

One particular strength of the Sparks program is its ability to capitalize on local human resources. Drawing in mothers and community members to participate in resource development already, the leap to engage community partners in lesson development and outdoor space development is a natural progression. Indeed, as was demonstrated in the teacher-led initiative to engage the local gardening expert following the mere suggestion during the interview process! It is easy to envisage other local community leaders and experts from a wide range of background being engaged into teaching a lesson or informing curricular content and units of inquiry for a variety of different lessons. These experts may also offer a variety of spaces for learning. For example, it would not be impossible to imagine a field trip to a farm where the children could engage with farm animals in a supervised and controlled environment.



*An elder comes into the school and teaches children at Sparks in April 2012. It is not difficult to imagine a field trip could be organized in a similar situation so children can engage with different spaces and continue to learn.*

*Credit: Sparks Academy in Kabul.*

#### 4. Curricular Content

As it stands, the Sparks curricular content is strong in areas of natural environment, plants and seasons. Teachers, students, and community members have demonstrated a willingness to participate in enhancing curricular content, if engaged in a well thought-through manner. Local traditions, histories, cultures and stories are increasingly becoming important in the Sparks curriculum, and human resources as well as spaces in the community can play an important role in guiding the curriculum.

#### 5. Assessment strategies

Many of the suggested assessment strategies are currently being used in the classroom, but not as methods of assessment. Rather, dance, arts, stories, and music are all a part of the day-to-day classroom activities. There is not a significant leap to continue these activities and begin to observe the students differently, thinking about their movements as assessment strategies.

### *Implications*

This research looked at the potential for integrating landscape into the curriculum for early childhood development in Kabul by specifically discussing the ideas with a group of teachers at the Sparks Academy schools in Kabul. The next stage of this research would be to look at the opinions of a larger subset of teachers that are not tied to Sparks as a school with a unique teaching culture. Questions of how teachers in Kabul's public schools might react to these kinds of proposals, and what their landscape and community resources may be, are important to understand.

The results of this research have already sown the seeds of change in the Sparks pedagogical style, and will inform a more rigorous training module over the coming months to encourage a more engaged landscape education model. Over the course of the implementation phase, detailed research and observations will be recorded to share the successes and challenges that teachers in Kabul face in trying to implement landscape education into their curriculum. These results will be shared widely in order to encourage other teachers and school to begin to think about how they may incorporate the lessons learned into their own programs.

## VIII. BIBLIOGRAPHY



*A mother reads to her son at Sparks in February, 2012.  
Credit: Sparks Academy in Kabul*

- Bailey, M. 2011. *Afghanistan in transition: putting children at the heart of development*. Save the Children.
- Siddique, H. "Unicef's state of the world's children report 2009: Where is the worst place in the world to grow up?" *The Guardian*. 20 November, 2009. Web. Last accessed December 3, 2011. <http://www.guardian.co.uk/news/datablog/2009/nov/20/children-unicef-report-2009-afghanistan>
- Montessori, M. 1992. *Education and Peace*. Clio Press.
- Edwards, C. 1998. *The hundred languages of children: the Reggio Emilia approach – advanced reflections*. Greenwood Publishing Group.
- de Berry, Jo; Fazili, Anahita; Farhad, Said; Nasiry, Fariba; Hashemi, Sami; Hakimi, Miriam. *The Children of Kabul: Discussions with Afghan Families*. Save the Children, Westport, CT. June, 2003.
- Mundy, Karen; Dryden-Peterson, Sarah. *Educating Children in Conflict Zones: Research, Policy, and Practice for Systemic Change--A Tribute to Jackie Kirk*. International Perspectives on Education Reform Series. September, 2011.
- New forms of Pre-school Education*. Final Report of a Study Group Meeting (New Delhi, 25 – 30 April 1983).
- Palka, Eugene J. *Afghanistan: A regional geography*. Military Academy, West Point, NY. Dept. of Geography and Environmental Engineering. 2001.
- Matsumoto, Yukitoshi. *Education for Demilitarizing Youth in Post-Conflict Afghanistan*. Research in Comparative and International Education, v3 n1, p65 – 78. 2008.
- Wisner, B., Blaikie, P., Cannon, T., Davis, I. 2003. *At Risk: Natural hazards, people's vulnerability and disasters*. Routledge.

- Boyden, J., Mann, G. 2005. "Children's Risk, Resilience, and Coping in Extreme Situations." In *Handbook for Working with Children and Youth: Pathways to Resilience Across Cultures and Contexts*, ed. by M. Ungar, 3-25. Thousand Oaks: Sage Publications.
- Fink, G. 2010. *Stress of War, Conflict and Disaster*. Academic Press.
- Grotberg, E. "A Guide to Promoting Resilience in Children: Strengthening the Human Spirit." In *Early Childhood Development: Practice and Reflections*. Bernard Van Leer Foundation. 1995. Web. Last accessed December 3, 2011.  
<http://www.resilnet.uiuc.edu/library/grotb95b.html>
- Hein, G. 1998. *Learning in the museum*. London: Routledge. Ch. 2, pp.14-40.
- Tishman, S., McKinney, A., Straughn, C. (2007). *Study Center Learning: An investigation of the educational power and potential of the Harvard University Art Museums Study Centers*. Harvard Project Zero.
- Louv, R. 2008. *Last child in the woods: saving our children from nature-deficit disorder*. Algonquin Books.
- Day, C., Midbjer, A. 2007. *Environment and children: passive lessons from the everyday environment*. Architectural.
- Frost, J.L. 2010. *A history of children's play and play environments: toward a contemporary child-saving movement*. Taylor and Francis.
- Aga Khan Trust for Culture. *Babur's Garden Rehabilitation Framework*. Aga Khan Development Network, January, 2004.
- Davoli, M., Cagliari, P. *Reggio Tutta: the evolution of a research project*. Innovations in early education: the international Reggio exchange. 10:3, Summer 2003.
- Davoli, M., Ferri, G. 2000. *Reggio Tutta: a guide to the city by the children*. Reggio Children.

- Bailey, M. 2011. *Afghanistan in transition: putting children at the heart of development*. Save the Children.
- Montessori, M. 1992. *Education and Peace*. Clio Press.
- Edwards, C. 1998. *The hundred languages of children: the Reggio Emilia approach – advanced reflections*. Greenwood Publishing Group.
- Ministry of Education, Islamic Republic of Afghanistan. *National Education Strategic Plan for Afghanistan 1385 – 1389*. 2004.
- Convention of the Rights of the Child. *United Nations General Assembly*. 1989.
- Afghan Youth Voices Festival. Kabul, Afghanistan. 2011.

## APPENDIX ONE

### A. SURVEY IN ENGLISH

For the following questions, write the most appropriate letter next to it. You need to choose (a) (b) (c) or (d) for each question.

- a) Don't understand
  - b) Yes a lot
  - c) No, not at all
  - d) Yes, A little bit
- 

Part I: Current Practice (questions that guide interview). The questions in this first section are about the way you already teach.

Teaching subjects: In your classroom verbal discussions with students:

- 1. Do you teach about the natural environment?
- 2. Do you teach about how plants grow?
- 3. Do you teach about care for animals?
- 4. Do you teach about the seasons?
- 5. Do you teach about important people in Afghan history?
- 6. Do you teach about local cultural traditions in Kabul?

Teaching resources:

- 8. Do you teach using books made by teachers at Sparks?
  - a. If yes, do these books include stories specifically about:
    - i. Plants
    - ii. Animals
    - iii. Streams
    - iv. Mountains
    - v. Cities
    - vi. Gardens
- 9. Do you teach using other teaching resources (embroidery, posters, knitted toys) made at Sparks?
  - a. If yes, do these materials include images of:
    - i. Plants
    - ii. Animals
    - iii. Streams

- iv. Mountains
- v. Cities
- vi. Gardens
  - b. If yes, do these include real:
    - i. Plants
    - ii. Animals
    - iii. Gardens

Assessing students:

10. Do you have students show their learning through:
  - a. Verbal explanation?
  - b. Drawing?
  - c. Drama?
  - d. Building something?
  - e. Writing stories?

**Part II:**

The following questions involve some changes in current practice that you or other teachers may be involved in.

Teaching sites:

1. Would you like to teach about the natural environment?
  2. If the school had a garden, would you like to teach there?
  3. If the school had a courtyard space, would you like to teach there?
  4. Would you like to teach a lesson that involved taking the children to the alley behind the school?
  5. Would you take the children to a park that was
    - a. If there was a park within a five minute walk from the school?
    - b. If there was a park within a ten minute walk from the school?
    - c. If there was a park within a thirty minute walk from the school?
  6. Would you like to involve a local expert as a teacher for a specific lesson? For example, an elder who can come to tell a story.
1. Assessing students:
7. Would you like students to show what they have learned through
    - a. Drawing?

- b. Dance?
- c. Speech?
- d. Song?
- e. Writing stories?
- f. Drama?
- g. Building something?

**Part III:**

Imagine that Sparks went from a 3 hour program to a 4 hour program. The last hour will be taught by another teacher. If this happens, answer the following questions.

Teaching Resources:

1. Would you like a storybook specific to your lesson plan?
2. Would you like students to create books for each lesson plan?
3. Would you like resources (embroidery, etc.) for each lesson plan?
4. Would you like students to create some of the resources for each lesson plan?
  - i. Teaching Sites:
5. Would you like students to visit Bagh-e-Babur for a lesson?
6. At Bagh-e-Babur, would you like students to: (please number the following 8 choices with the choice you like the best as number 1, second best as number 2, all the way to your eighth choice as number 8)
  - 1) Free play activities
  - 2) Nature-mapping activities around the garden
  - 3) Play space mapping activities around the garden
  - 4) Creative story telling about natural environment
  - 5) Creative story telling about Babur's life
  - 6) Drama related activities that teach about the garden's history
  - 7) Musical activities that teach about the natural environment
  - 8) Dance activities that teach about the gardens spaces
7. If you had a garden at Sparks... In the Sparks garden, would you like students to show:
  - a. Displays of their art work from Bagh-e-Babur activities?
  - b. A dance/music/speech/drama concert activities engaged with at Bagh-e-Babur?
  - c. Drawing a picture of what they think a garden can look like at Sparks.

## B. DARI TRANSLATION

اسد تادان زید سندنند. وحدتی شما نواز ندارید تا نام خودیش را بر روی پارچه خودیش بنویسد. لطفاً در

ارایه پاسخ دهید. تان صادق بوده و آنچه را که در مورد اسد پارکس واقعیت است در پاسخ به سوالات

ارایه نماید. زیرا بدین ترتیب ما ارزیابی درستی از روش تدریس و آموزش مکاتب داشته و

برنامه‌های مناسبی به اسسند تا بیچ ارزیابی طرح‌ریزی نمایدیم. می‌تواند

در حل هر یک از سوالات، یکی از حروف‌های ذیل را که با جواب شماره‌بده‌یش دارد انتخاب نماید: (

یا "د" را بر روی هر یک از سوالات انتخاب نماید (بد) شما باید الف، ب، ج و

الف) آگاهی ندارم

ب) بلی، اکثراً وقت

ج) نه خیر، هیچ‌گاه

د) بلی، بسیار ندرتاً

ف) علی. سوالات این بخش مربوط به روش فعلی تدریس شما می‌باشند. بخش اول: طرز تدریس

موضوعات درسی: با شاگردان در صنف هنگام مکالمه لفظی:

1. دینکیم سیردت ناشی‌ارب تس‌یز طی‌حم مرابرد ای‌آ.

2. دینکیم سیردت ناشی‌ارب ارتات‌ابن دشر یگن‌وگچ ای‌آ.

3. دینکیم سیردت ناشی‌ارب ارتان‌اوی‌ح زاتب‌قارم ای‌آ.

4. دینکیم سیردت ناشی‌ارب ارتاس‌ل‌وصف ای‌آ.

5. دینکیم سیردت ناشی‌ارب ناتسن‌اغف‌اخیرات مهم‌ص‌اخشا مرابرد ای‌آ.

6. دینکیم سیردت ناشی‌ارب لب‌باک‌یل‌حم و یگن‌هرف‌جاور و مسر مرابرد ای‌آ.

منابع تدریس:

7. پس خودیش اسد تادان روش متخ‌اس‌س‌ک‌راپ‌س‌نادات‌س‌اط‌س‌وت‌مک‌ی‌اه‌بات‌ک‌زا‌امش‌ای‌آ.

می‌نماید؟

الف) در صورت ب لی، آیا این ک تاب ه شامل ک تاب های معلوما تی و ک تاب های ق صه در مورد انوین

ذیل می باشد؟:

- ذ باتات -
- حیوانات -
- جوی بارها یا آب های روان -
- کوه ها -
- شهر ها -
- باغ ها -

8. میزود کم آبی اه هچراپ ل یبق زا ،تسا مدش متخاس س کراپسا رد مک ی سرد یرگی دی اه داوم ز امش ای آ .

پ وس تر هو ب از ی چه هی دست دوخ ته در ت در یس خویش اس ت فاده می نماید ید؟

الف) در صورت ب لی، آیا این مواد هی در سی ت صاویر ذیل را دارند؟

- ذ باتات -
- حیوانات -
- جوی بارها یا آب های روان -
- کوه ها -
- شهر ها -
- باغ ها -

ب) در صورت ب لی، آیا این مواد هی در سی شامل نماید ش موارد ح ق ی قی ذیل ب رای شاگ ردان می باشدند:

- ذ باتات -
- حیوانات -
- باغ ها -

زیادی شاگ ردان:ار

9. دن مدب ناشن ل یذ ی اه شور زا یکی زا مدافستسا اب ارش یوخ ی اه متخوم آ مک دیراد ین ادراگاش ای آ .

الف) تشریح لفظی؟

ب) رسامی؟

ج) نمای شدنمه؟

د) با وسیله ساختن چیزی؟

ه) نوشتن قصه؟

اسد تادان می بخش دوم: سوالات ذیل در آوردن بعضی تغیرات در روش فعلی تدریس شما و سایر  
باشدند:

مناجبع درسی:

1. دی‌یامن سیردت تسیزی طیحم مرابرد دی‌هاوخیم ای‌آ.
2. دی‌یامن سیردت ن‌آ مرابرد دی‌هاوخیم ای‌آ، دش‌اب غاب کی ای نم‌چ کی ی‌اراد س‌کراپس‌ا رگا.
3. دی‌یامن سیردت اجن‌آ رد دی‌هاوخیم ای‌آ، دش‌اب گرزب مطوحم کی ی‌اراد بت‌کم رگا.
4. ا تدریس ک‌نید که بردن شاگ‌ردان را درک وچه عقب‌مک تب در برداشد ته ر عوضوم دی‌هاوخیم ای‌آ.  
باشد؟

5. مک‌دی‌ربب کراپ کی هب ار ل‌افطا دی‌هاوخیم ای‌آ.

الف) اگر رپارکی در فاصله پنج دقیقه از مک‌تب قرار داشته باشد.

ب) اگر رپارکی در فاصله ده دقیقه از مک‌تب قرار داشته باشد.

ساعت از مک‌تب قرار داشته باشد (ج) اگر رپارکی در فاصله نیم

6. توعود داتسا کی تیح هب یل‌حم هتسن‌اد درف‌زای ص‌خشم عوضوم سیردت ی‌ارب دی‌هاوخیم ای‌آ.

ب‌عمل آورید. (مثلاً یکی از والدین یا یکی از بزرگان جامعه که یک قصه را برای اطفال

ب‌گوید.)

ارزیابی شاگ‌ردان:

7. خویش‌رات و وسط روش‌های ذیل نشان دهند. ی‌اه مت‌خوم‌ان درگاش دی‌هاوخیم امش ای‌آ.

الف) رسامی؟

ب) رقص؟

ج) گیتار؟

د) آهنگ؟

ه) نوشیدن قهوه؟

و) نمای شدن ماه؟

ز) ساختن چیزی؟

بخش سوم: فرض کنید که 4 اوقات درسی اسد پارکس از سه ساعت به چهار ساعت ارتقا پیدا کرد و پس سوالات ذیل را جواب ساعت اخیر آن توسط معلمی دید. نگری تدریس شود، اگر چه زمین شود، دهید:

مواد هلی درسی:

1. دی‌ش‌اب متشادش‌یوخ‌ص‌خشم‌یسرد‌ن‌ال‌پ‌ره‌دروم‌رد‌یی‌مصق‌باتک‌دی‌ه‌او‌خ‌یم‌ای‌آ.
  2. دن‌زاسب‌باتک‌یسرد‌ن‌ال‌پ‌ره‌یارب‌ندرگاش‌مک‌دی‌ه‌او‌خ‌یم‌ای‌آ.
  3. باشد‌ید؟ متشادش‌یوخ‌یسرد‌ن‌ال‌پ‌ره‌یارب‌(یزود‌تسود‌ی‌اه‌داوم‌دن‌نام)‌یسرد‌داوم‌دی‌ه‌او‌خ‌یم‌ای‌آ.
  4. دن‌ی‌امن‌داج‌ی‌ا‌یسرد‌ن‌ال‌پ‌ره‌یارب‌ار‌یسرد‌ی‌اه‌داوم‌یض‌عب‌ناشد‌وخ‌ندرگاش‌دی‌ه‌او‌خ‌یم‌ای‌آ.
- مناظر تدریس:
5. دی‌رب‌ب‌رباب‌غاب‌مب‌یسرد‌رفس‌کی‌رد‌ار‌ندرگاش‌دی‌ه‌او‌خ‌یم‌ای‌آ.

6. از 1 ارزش‌یوخ‌باختن‌افطل: دن‌مد‌اج‌ن‌ار‌ل‌ی‌ذ‌ی‌اه‌ت‌ی‌ل‌خ‌ف‌ندرگاش‌دی‌ه‌او‌خ‌یم‌ای‌آ، رباب‌غاب‌رد. الی 8 به ترتیب از بهترین انتخاب خودش تا کمترین انتخاب خودش شماره‌گذاری نماید. این انتخاب در شماره دوم و به همین م‌ثلاً به بهترین انتخاب‌تان در شماره اول، دومین ترتیب‌تان انتخاب‌شده‌تم)

الف) بازی های آزاد

ب) فعالیت های تعریف موقت مبتنی بر باتانت در باغ با بر

غایب ردی زاب تی عقب و م نی عت ی اه تی ل اعف (ج)

د) قصه های جالب در مورد مد ی طزی ست

ه) قصه های جالب در باره زندگی با بر

و) اجرای نمایشنامه های مرید و طبه تاریخ باغ با بر

ز) فعالیت های موسیقی که در آن دربار مد ی طط بیعی تدریس نماید

تدریس نمایش (ح) اجرای پارچه های رقص که در باره فضای باغ

یاه تی ل اعف رد ن اد رگ اش س کرا پس ا نم چ رد مک دی ه اوخ یم ای آ، دش اب نم چ کی ی اراد س کرا پس ا رگا. 7.

ذیل مصروف باشند:

الف) نمایش کارهای هنری شان از فعالیت های باغ با بر

ب) یک مجلس که شامل رقص، موسیقی، گفتمان و نمایشنامه مرید و طبه فعالیت های شان از باغ

اشدند؟ با بر

ج) تدریس تصویری در مورد اینکه چمن اسد پارکس چگونه می تواند به نظر رسد؟