Green blue spaces
where play and learning are natural

Exploration 6
Belize 2017-2018

An inspiration book
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Exploration 6

This inspiration book aims at promoting Green Blue spaces and nature play innovation. It was developed during a PlayFutures exploration (2017-2018) funded by the LEGO Foundation. It has been implemented thanks to the collaboration and partnership with the Faculty of Education and Arts at University of Belize and a team of practitioners and researchers passionate about learning through play.

What is an exploration?
An Exploration refers to the work of a team of 4-6 practitioners and researchers, in identifying a challenge and proposing ideas or solutions to address it. The type of deliverables can be very different from one exploration to another: flashcards to start learning through play from scratch in a school in a low resourced setting; present the benefits of learning through play to parents, invite local communities to play more everyday everywhere (with a chalkboard inviting people to reconnect with their best childhood play memory); methodology to actively engage children in playful reading experience; communication guideline to talk to parents and the creation of green blue nature play spaces, learning and innovations.

Green Blue Thinking!
Among the proposed topics to launch the explorations, one topic was expressed by several participants: how to promote learning through play outdoors, in natural settings and how to reconnect children to nature and enjoy all of its benefits. On top of that, one particular idea was proposed by Paula Benjamin from Belize - to implement the concept of learning through play in the Caribbean, by empowering communities and education stakeholders to renew the way they teach and engage the children, through green blue nature.

PlayFutures exploration 6’s team
James MacDiarmid (Australia), Devon Hamilton (Canada), Paula Benjamin (Belize) and Louise Zimanyi (Canada).

Why an Exploration on green blue spaces?
- Engage in a global movement to promote children’s regular access to and direct engagement with and in nature (IUCN, 2012)
- Advance the implementation of the UN Sustainable Development Goals (4, 13, 14, 15) in Harmony with Nature (UN, 2018)
- Initiate capacity building of teacher educators and future teachers to impact future generations of children
- Pilot learning through play in Caribbean Green Blue Spaces, in line with national education strategies, Early Childhood Development plans and the Sustainable Development Goals as defined by the United Nations.

What is the vision behind this exploration?
The PlayFutures (PF) team vision is to create new partnerships, and promote nature play advocacy with Caribbean change makers. The LEGO Foundation has funded global collaboration and supported use of online tools and networking arrangements.

In March 2018, a Caribbean adaptation and pilot initiative was developed in collaboration with the Faculty of Education and Arts, University of Belize, building on Denmark’s Forest Schools concepts as well as US, Canada and other global Nature Play programmes, global research, community learning and action. The PF team joined with their Belizean colleagues in an exploratory natural spaces workshop.

We use the local context of Belize as a prototype environment - a natural playground to explore and test techniques for empowering Caribbean teachers to use play and nature as pedagogical tools.

Benefits of green blue spaces
- Nurtures children’s physical, social, emotional and cognitive development, creativity and resilience
- Promotes health and wellness
- Supports the development of ecological literacy and environmental stewardship (Gill, 2011)
- Provides low-cost, ever-changing and accessible learning environments
- Fosters fundamental skills development in an iterable, stimulating and relevant context

“A child’s play is not simply a reproduction of what they have experienced, but a creative reworking of the impressions he has acquired.”

- Vygotsky

“Look deep into nature, and then you will understand everything better.”

- Albert Einstein
Our approach

Step 1: Field visits:
Field visits to understand the local context and meet with the active actors.

Step 2: Co-design green blue workshop:
With teachers and students

Step 3: Start building capacity:
Professional training module on blue green spaces + practical exercises to implement.

This exploration is structured in three main steps:
Step 1: the team visited Belize to learn through field visits, get a better understanding of the local context and planned a one-year exploration.

Step 2: the team organized a co-design workshop with early childhood education students and faculty at the University of Belize, to prototype elements useful in proposing a green blue spaces approach by taking into consideration the opportunities and constraints of the local context. It was also a way to involve some stakeholders early in the design process.

Step 3: the goal is to establish a partnership with the University of Belize, to see how a third and final trip to Belize could be a sustainable capacity building opportunity for teachers on green blue spaces.

Naturalising Playspaces – indoors and outdoors.
How do we do it?
- Natural materials and loose parts for open-ended play and building
- Engaging with weather and seasons
- Food/flower gardens
- Potential for play and learning in multiple contexts
- Water and sand for sensory learning
Step 1: Field visits & literature review

In June 2017, Briefing meetings arranged for the PlayFutures Exploration team were held in Belize. Participants were administrators and teachers of schools in Belize City and Placencia and a UNICEF Representative. Other informal ‘meet and greet’ visits were facilitated with the Deputy Director of the Caribbean Community Climate Change Centre (CCS), Belizean tourism providers, tour operators, artists, an art gallery, an art foundation and other local environment organizations. The team also participated in a Skype call with Dr. Wallace J. Nichols (author of “Blue Mind”).

Key learnings from our observations:
- All local stakeholders were eager to learn, participate and act on the Exploration initiative in support of Belize’s environmental preservation efforts.
- The Exploration discussions on natural playgrounds, Green-Blue learning, nature spaces and concepts were well received by educators as innovative pedagogy that would deepen engagement with children and would align with the local ECD curriculum.
- There was a strong willingness to collaborate, as evidenced by diverse expressions of need for children to engage more with nature through play e.g. playground designs that would promote brain stimulation, expanded nature play and outdoor exploration.
- While playgrounds visited were spacious, they were designed for physical play and interaction. These outdoor facilities were quite traditional with some grass and few shaded spaces.
- The Exploration and the University of Belize teams formulated proposals as follow-up to the Exploration March 2018 pilot of a Green-Blue design workshop, which would facilitate teachers’ engagement in the summer break professional development training.

A game-changing movement, NatureForAll is a global movement founded on a very simple idea: the more people experience, connect with, and share their love for nature, the more support and action there will be for its conservation. Launched in September 2016 at the International Union for Conservation of Nature it encourages more partners to share their programmes and solutions for connecting people with nature, increasing understanding among audiences, encouraging successful and innovative partnerships and raise public and media attention.

This report highlights children’s rights and the environment by:
1) ensuring a sustainable environment by protecting biodiversity, ecosystem services and natural resources
2) providing equitable access to the benefits of natural resources and healthy environments
3) providing children with child-friendly environments with the freedom to play, be active and independent, give ability to interact with nature as an underlying determinant of their rights to health and development.

A landmark book by marine biologist Wallace J. Nichols on the remarkable effects of water on our health and well-being. Why are we drawn to the ocean each summer? Why does being near water set our minds and bodies at ease? In Blue Mind, Wallace J. Nichols revolutionizes how we think about these questions, revealing the remarkable truth about the benefits of being in, on, under, or simply near water.

A resource for teachers to help them build children’s understanding of the world by making the shift to environmental inquiry, building on children’s natural curiosity about the world in which they live, with children’s questions driving the learning process, learning by doing (through direct experience) This is based on a holistic view of education where students are encouraged to make connections between disciplines and finally stewardship referring to human actions that contribute to a sustainable future for humans, animals and plant species alike.
Step 2: Co-design the workshop agenda

In March 2018, the Exploration team organized a co-design workshop with faculty, and students of the University of Belize in collaboration with the Dean of Education.

Design Goals
To introduce participants to the power that natural spaces have for childhood development and learning; connecting to the underlying nature pedagogy; illustrating how easily natural materials can be incorporated into a play-based skills focused curriculum.

Agenda
- Earliest Play Memories
- Build a... (group construction challenge from loose parts)
- Play and nature context
- Deconstructing play
- Risk Benefits Discussion
- Reflection Activity: define personal goals
- Walk in the Woods and Micro-hike
- Build a... (storytelling with loose parts)
- Principles of play spaces
- Play Comparison (playground and Guanacaste National Park)
- Design a space, build your design
- Journey reflection sticks

Natural materials and loose parts for open-ended play and building
- Engaging with weather and seasons
- Food/flower gardens
- Potential for play and learning in multiple contexts
- Water and sand for sensory learning

See appendices for video montage about the workshop.
Top photo: Fragments of Hope
The Green/Blue spaces workshop emphasized the need to use the natural environment as a learning laboratory. This builds on a pragmatic approach to learning which highlights the need to bring the real world into the classroom.

Priscilla Brown Lopez, EdD

We enjoyed being outside learning. I surely believe my future students will love it even more than I do. I plan to use what I have learned at the workshop to better off myself and my students.

Taruni

We should integrate teaching in the outdoors include water and nature using things from the earth to create teachable moments.

Michelle Dolmo

Learnings and post-workshop reflections indicated a need for:

- Ongoing communication, resources, workshops and ideas on ways to improve green blue spaces at school, home and community
- Workshops that involve principals and management from institutions
- Workshops in the summer during the Education professional development week
- Opportunities to advocate and promote green blue Belize and green blue Caribbean play and learning
- A green blue curriculum guide to support with implementation
- More green blue training sessions, not just for ECEs but also for parents and the Ministry of Education

Resources to go further

Websites
- www.playfutures.net
- www.playgroundideas.org
- www.designthinkingforeducators.com
- https://childrensdesignguide.org/
- International Union for the Conservation of Nature
  - www.iucn.org
- UN Harmony with Nature
  - http://harmonywithnature.un.org
- Nature for All
  - http://natureforall.global/
  - https://natureforall.global/how-to-natureforall/#how-take-action
  - http://naturalcuriosity.ca/
  - http://fragmentsofhope.org/teachers-corner/
- Webinar
  - https://vimeo.com/300451045
- Websites
  - Gill, T (2011) The benefits of children’s engagement with nature
- Videos
  - Project Wild Thing: the science of nature: https://www.youtube.com/watch?v=B2s7XSHlw6o
  - Transforming-Teaching-for-Sustainable-Solutions
  - Classrooms without walls: bringing the natural world into teaching and learning: https://www.youtube.com/watch?time_continue=14&v=W5s5bZqP5PA
Step 3: Proposals for consideration

Through a phased co-design collaboration of capacity building and/or design agendas:

1) Innovating the use of existing natural spaces and creation of natural playspaces that facilitates:
   • child engagement with natural and loose parts as well as nature designs based on local environmental contexts and culture
   • community consultations, stakeholder analysis to inform concept creation, design challenges and to innovate solutions
   • training in the use of natural spaces and playspace design, building and project implementation

2) Research on the use of natural spaces and prototype nature play spaces to benchmark skills developed, cultural specifics and learning outcomes

3) Develop a national and region-centred cohort of likeminded ECD professionals to share program, pedagogy and physical designs after having gone through a co-designed PD intensive on nature play that:
   • develops a support network between educators across the country and region that can inspire and support each other with ideas and training
   • shares programmatic approaches that can be transferred to different environments
   • builds the linkages between theory and pedagogy
What’s next?

University of Belize vision

**UB’s Vision**
- UB’s Effort to increase the number of trained teachers in Belize
- Sensitization of parents and the community on the importance of ECE through workshops, social media, open day
- Incorporate Green Blue Spaces in the EC Curriculum
- Incorporate the Green Blue Spaces in methodology courses
- Collaborate with PlayFutures to introduce Green Blue Spaces in Belize
- Improve the infrastructure of UB Preschool to promote play using Green Blue Spaces

**Transformation of the Center**
- New building with ECE standard requirements (bathroom attached)
- Upgrading of playground: lawn should be healthy, green grass instead of rocks
- Have a sand area available
- Labeling of materials in the playground
- A need for more playground materials

**2018 (Stage 1)** Facilitation by PF6 core team members towards capacity building, in partnership with University of Belize early childhood education students.

**2019 (Stage 2)** Implementing Blue/Green spaces at UB’s Early Childhood Center and in method course at the University of Belize. Development of a Green/Blue Spaces curriculum and training resources.

**2020 (Stage 3)** Ongoing training for teachers at the national level, conducting research to assess effectiveness of this innovation in Belize and improving UB’s Early Childhood Center to promote learning through play.

**Stage 4** To be imagined.
PlayFutures Co-Creation & Learning through Play

What is PlayFutures?
PlayFutures is a global research and innovation community launched in 2016. It is convened and funded by the LEGO Foundation. It brings together 1500 researchers and practitioners to contribute to advancing and advocating for the knowledge and practice of learning through play.

6 explorations launched in 2017
After a call for innovation ideas launched in 2016, PlayFutures launched 6 international explorations to give the opportunity to practitioners and researchers to collaborate and study how play and learning can be implemented in a practical way in different contexts and cultures.

The key objective was to reinvent traditional ways of teaching, to better support whole child development needs in the 21st century through play.

In total, 6 explorations have been launched to support learning through play, lifelong learning, lifestyle and wellness innovation. The intent is to accelerate or leapfrog current education issues by bringing learning through play as a natural way to learn in different contexts: at home, at school, in public spaces and natural settings. www.playfutures.net

What we mean by “Learning through play”
We say learning through play happens when the activity:
1. is experienced as joyful
2. helps children find meaning in what they are doing or learning
3. involves active, engaged, minds-on thinking
4. supports iterative thinking (experimentation, hypothesis testing, etc.)
5. promotes social interaction.


The LEGO Foundation
The LEGO Foundation is a Danish corporate foundation which aims to build a future in which learning through play empowers children to become creative, engaged, lifelong learners. The foundation is dedicated to re-defining play and re-imaging learning to ensure children build the broad set of skills they need to thrive and succeed. The Foundation is headquartered in Billund, Denmark and with office locations in Boston, USA, Mexico City, Mexico, Johannesburg, South Africa and Kyiv, Ukraine.

Play and learning are like the two wings of a butterfly, interconnected and interdependent.

Carla Rinaldi,
Reggio Children
Authors

Devon Hamilton
Dr. Devon Hamilton is a consultant for formal and informal learning who has spent over 20 years creating experiences and environments for learning – from classrooms to museum exhibitions to outdoor spaces.

James MacDiarmid
Learning designer, consultant and founder, James MacDiarmid, is the creative force behind EcoCentric Design consultancies, as well as BarefootTV, a web and mobile based platform connecting students with unique learning experiences. According to James, in order to deliver improved educational outcomes, as well as positive psychological benefits for children, we must learn to look to nature’s principles.

Paula Ann Mohamed Benjamin
Paula Ann Mohamed Benjamin, retired Manager of the United Nations Development Programme (UNDP) and interested in sharing 40+ years of development experience to facilitate, design and implement innovative development initiatives that sustain and support Caribbean Small Island Developing States (SIDS) communities, children and citizens.

Louise Zimanyi
Louise Zimanyi, Professor/ Researcher, Early Childhood Education, School of Health Sciences, Humber College. She has extensive global experience in early childhood development program, policy and advocacy, is researching place-based pedagogies and is a PlayFutures advisory board member.

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