Sutcool Taking active teaching and learning outside

John Cleverley on behalf of the Feilden Foundation







This guide has been written by John Cleverley on behalf of the Feilden Foundation. John taught in the UK for several years and spent a year as a teacher and educational adviser whilst living in Uganda. He has written this guide to help others investigate the opportunities of Active Teaching and Learning in the outdoor environment. The document has been designed and illustrated by Stephanie Sandall, administrator to the Feilden Foundation in the UK. It is free to download from the Feilden Foundation website.

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"This way of learning is more realistic than theoretical. The students enjoy learning more when they are involved and in control of it. As a teacher, I have changed practice. I used to lecture my students but now my role is to facilitate learning."

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Sarah Nawuma, National Teachers College Kaliro.

INTRODUCTION **ABOUT THE GUIDE**

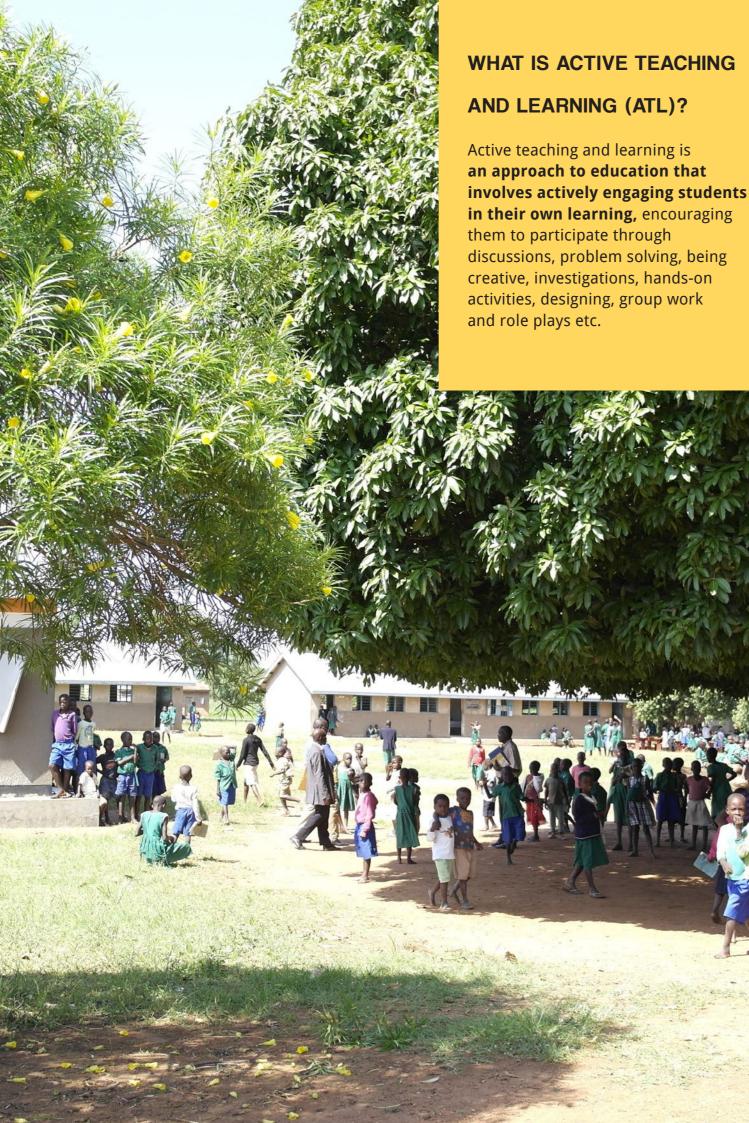
This guide is written for teachers, head-teachers and other education practitioners who wish to develop their practice and their schools, based on evidenced based approaches to learning.

As it is intended to be used at school level the guide is written in a very practical way, with examples, ideas and photographs included to make it as relevant to the user as possible. We hope that as you read it, you will find the examples and activities suggested both inspiring and achievable for your school community.

We appreciate that many educators coming across this guide will not have a thorough understanding of 'Active Teaching and Learning' (ATL), which is at the heart of the thinking behind the activities. In essence, ATL is about making learning active and engaging, it keeps the students at the centre of their education and sees the teacher as a facilitator in the learning process. This guide introduces the idea of ATL, with links given for further reading and understanding. We hope that if ATL is a new concept for you, then you will be on the first step of your journey towards adopting a more active approach to your teaching practice.

Please adapt, copy, add to and circulate the ideas and principles in this guide, as we appreciate that it will be of most benefit to teachers when they make it applicable to their own school situation and context.

> And in the spirit of active teaching and learning, have fun with this guide!



INTRODUCTION **OUTDOOR LEARNING - PART OF ATL**

Learning outdoors is the natural way that children approach discovery across the world. Ugandan children living in a rural setting are generally very connected to their natural environment in their informal play, daily lives and in the household chores that they do. However, teachers and schools are used to a classroom based learning mode and will often only use outdoor spaces, such as the shade of a tree, out of necessity. Added to that the challenges of large class sizes, lack of funds and isolation from other practitioners can mean that it is difficult for teachers to envision another way for students to learn.

There is a huge amount of potential, even in schools with the least resources, to use land and local materials to inspire children and help them to learn in a more active way. Although hands-on activities and use of outdoor spaces does happen, it is mainly confined to breaktimes, agricultural work and sport sessions. However, the creative use of outdoor spaces in everyday school learning activities can deepen the benefits of active teaching and learning. This can lead to a heightened level of engagement, especially with pupils who may be less engaged in an indoor setting.

Movements towards a greater connection to nature and use of spaces for active learning have been made in many countries, with the growth of Learning Through Landscapes, Learning Outside the Classroom and Forest Schools, (www.ltl.org.uk | www.lotc.org.uk | www.forestschools.com) in the UK in particular. We should note that we are grateful to Learning Through Landscapes as the planning section of this guide was adapted from their excellent online resources.

An evidenced based study by King's College London (LINE Benefits, 2011) also adds to the voices that

"Learning in the natural environment contributes to a much richer and active educational experience that fosters wellbeing and a sense of connection with people, place and nature." being taught in National Teacher Training

Thousands of Ugandan teachers are currently Colleges on how to make use of an ATL approach in schools. Integrating outdoor learning to this development in teaching will enhance their practice and enable your school to adopt educational changes promoted by the Ministry of Education and the National Curriculum Development Centre to provide,

"A holistic Curriculum for producing responsible Citizens equipped with productive skills."

These approaches have not only led to greater inclusion and self-esteem in students, but also promote more meaningful learning and enjoyable teaching opportunities.

"When planned and implemented well, learning outside the classroom contributed significantly to raising standards and improving pupils' personal, social and emotional development."

OFSTED 2008 Report: 'Learning outside the classroom...'

INTRODUCTION

ACTIVE LEARNING VS PASSIVE LEARNING

This guide is written to encourage the use of 'Active Teaching and Learning' in your school using the outdoor areas available to you. ATL is an education approach that will greatly enhance the quality of learning for pupils and can be used effectively both in and outside of the classroom.

As the name suggests, active learning is about learners being engaged and actively playing a part in their learning rather than passively listening to the teacher or simply reading or copying out text. This type of learning includes activities that involve the students in some way, often making use of their imaginations and creativity and developing their critical thinking skills. ATL in general is more focussed on enabling learners to understand the world around them and not only learn facts and information about it. As you read through the ideas in this guide, you should get a good sense of the range and type of activities that fall under the term Active Teaching and Learning.

Why not start here if you have an internet connection? www.cambridge-community.org.uk/professional-development/gswal

To get training or advice about ATL in Uganda, contact Red Earth Education by visiting: www.redeartheducation.co.uk

To prompt thinking about how you can work towards making your teaching more active, this table highlights the benefits of a hands-on approach and shows how the outdoor setting lends itself to more active teaching methods.

In general terms, students remember and understand more when they are actively engaged in what they are doing, and learning outcomes from active lessons will be enhanced and more advanced compared with passive learning lessons.

TYPE OF LEARNING	LEARNING ACTIVITY	PUPILS GENERALLY REMEMBER	PUPILS ARE ABLE TO
Passive Learning	Read from a textbook	A small amount of what they read	Define List Describe Explain
	Listen to the teacher	A little of what they hear	
	Look at images and drawings	Some of what they see	Demonstrate Apply Practice
	Watch a demonstration	About half of what they see and hear	
Active Learning	Participate in a hands-on activity Design, analyse and apply something related to the lesson	Much of what they say and write	Analyse Define Create Evaluate
	Experience or model an aspect of the lesson Perform a presentation Design a learning tool for others	Most of what they actively do	





"The more a student is engaged in their own learning, the more learning actually takes place because then they exercise their minds to think beyond what the teacher feeds them, and will be able to solve problems even when out of school."

Sydney Mutyaba, student at Makerere University.

The following ideas and examples are provided to spark interest and to ignite your own creativity. You can copy them, but you might also select an idea to develop and adapt to your school's specific context and site. The ideas have been placed in order of how easy or difficult they would be to implement, which also depends on your locally available materials. Examples of how you might wish to use each of the ideas are also given to help prompt thinking about how these could be used in your day-to-day practice.

Once you have been inspired by these examples, you can move on to the project planning stage in the next section, where aims, objectives and activities can be set. We feel that it is important first to see some practical examples and for you to discuss these with your colleagues and perhaps then play with and consider some ideas before deciding on a course of action. If there are a number of ideas that you would like to develop, we would encourage you to either print them out, or write them on pieces of paper for use in discussion with your colleagues and to help your planning be a more active and participatory exercise.

As part of your asset mapping, it is also a good idea to visit other schools in your area who may already be using their site for outdoor learning in some way. You may wish to collaborate with them and have a working group of local schools so that you are able to learn from each other and keep teachers and pupils motivated.

Most of the following images are from Ugandan schools who have already started their journey towards using outdoor learning for ATL. It shows that creativity exists in schools across the country, with examples from: Masindi, Lyantonde, Kabale, Kampala, Jinja and Kumi.

IDEAS



IDEAS USE SUBJECT RELEVANT MATERIALS

If you are teaching a subject and the actual material is present, then use that instead of relying on the blackboard and books. In this instance different types of soils are to show the difference in particle size, texture and colour of types of soil.

SUGGESTIONS:

When studying something physical such as soil, foods, crops, types of tree and materials, ask pupils to collect some of the materials from the school grounds or from home. Create an outdoor display that can benefit learning for the whole school and be adapted and added to over time.



IDEAS ENCOURAGE GAME PLAYING AREAS

Children will often make their own games using local materials such as rocks and seeds. Make this easier for them by providing shaded spaces for them to do this and allow them to have access to the materials themselves.

SUGGESTIONS:

Give students a variety of materials including bottle tops, stones and large seeds. Ask them to create a game that they have either made up or know already. They then have to teach their friends this game at break-time and make improvements to it based on the feedback they get from other students.

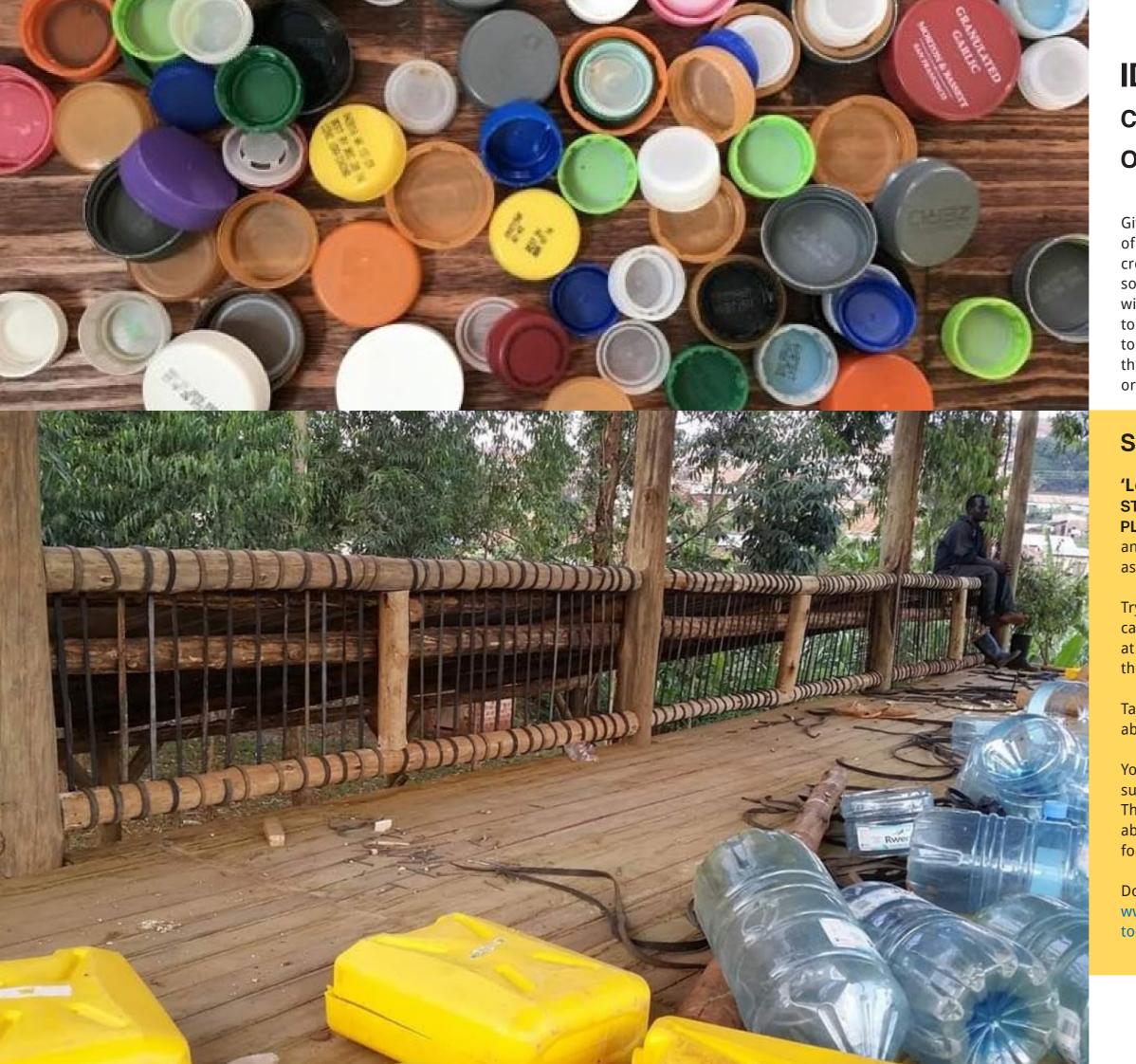


IDEAS USE STONES TO CREATE DISPLAYS AND SHAPES

When budgets are very low, temporary interactive displays can still be created using local materials such as stones, sticks, seeds and soil. Temporary displays can be created to check students' understanding and knowledge of a particular subject.

SUGGESTIONS:

Ask students to re-create a diagram that they have learnt about in class using local materials. Can they add more to what was already learnt? Use this technique to explain ideas such as the water cycle, or the concepts of area and volume in maths.



IDEAS CREATE AN AREA OF 'LOOSE PARTS'

Giving children the ability to create something of their own using various objects facilitates creative thinking, imagination and problem solving. Having an area of the school grounds with a variety of 'loose' items for children to play with, can easily be set up and lead to more active learners. Children can make things from the items like a car, or a bridge, or use them in a game on their own.

SUGGESTIONS:

'Loose' items can include: STICKS, STONES, BRICKS, SEEDS, PLASTIC BOTTLES, JERRY CANS, TYRES and anything else that can be safely assembled and dissembled by children.

Try leaving a space with items that students can experiment with and freely move around at lunchtime and see what they make or use the items for.

Talk to them about it in class and find out about their thought processes and ideas.

You can start them off with a problem to solve, such as to create a new game or make a chair. Then groups can comment on what they like about the design and offer suggestions for improvements.

Download a useful guide on Loose Parts Play: www.ltl.org.uk/resources/loose-parts-playtoolkit-for-schools



IDEAS BUILD DENS

Children love making dens and enclosures, spaces which they create, and they own. These are generally very temporary and can be seen as using creative skills as well as constructional skills. Often the simplest of structures can, in the child's imagination, become vivid.

SUGGESTIONS:

Encourage children to use old or used 'waste' materials to create personal and individual or shared enclosures.

Provide a wide range of simple resources to create shelter from the sun or even the rain. Offcuts of wood strapped or tied together can be covered with waste fabric to provide an enclosure or hideaway.

Ask them to describe what they are making in their own words. How could it be improved? What would a more ideal structure look like?

Take care with anything that could cause injury and supervise any use of tools.

Encourage the children to clear away temporary shelters and dens when they are no longer used and set aside the material for reuse or recycling.



IDEAS DESIGN MULTI-USE FEATURES

As well as giving pupils something to play on at break-time, some features can have other uses for outdoor learning during lesson times. A log stairway like this one can be a great tool in various lessons, from Maths to English and Science.

SUGGESTIONS:

Draw chalk numbers on the logs and ask a couple of students to find the correct answer to a sum by standing on that number. Start a student off on a number and ask them to step on all the numbers that are factors of the first number. Use the same idea with letters for spellings and words endings, getting them to walk around on the logs to express their answers.



IDEAS CREATE SCHOOL GARDENS

Various scales of school gardens can engage pupils in the food growing process, highlighting different crops, growing cycles and types of soil. Different scales of garden can be used depending on your space, including: sack gardens, kitchen gardens, raised beds and field crops.

SUGGESTIONS:

Students can work in groups to maintain their small garden, learning team work and assessing what their plants need to grow well. Produce from the gardens can be used in school food and weighed and measured together on an ongoing tally. A class competition for the best garden can also help increase interest and engagement. Why not invite a knowledgeable parent or grandparent in to school to teach some gardening techniques to pupils? This can be a good way of engaging the wider school community.



IDEAS PAINT ONTO NATURAL FEATURES

You may have rocks, trees and felled branches on your site. Use these as assets which you can paint things on to aid learning. This can be as simple as the alphabet as seen here, a series of terms relating to a particular subject or a school motto that that you can incorporate into your teaching outdoors.

SUGGESTIONS:

Consider what visual resources you often use on the blackboard and re-create these in an outdoor space in 3D. For instance, if you are often referring to the periodic table in Science, paint one outside that you can get students to stand on. Or, if you are commonly using structured sentences, paint them on a log and fill in blank words in chalk.



IDEAS RE-USE OLD PLASTICS AND TYRES

By using old and used materials, you can cheaply create all sorts of structures, from shade walls to read behind, to privacy screens for toilets and wind breaks for outdoor learning areas. Materials such as old jerry cans and plastic containers have the added advantage of adding colour to your spaces and they don't have the same dangerous sharp edges that iron sheets do.

SUGGESTIONS:

Use old jerry cans sliced in half to create shades next to outdoor areas where children read. You can add shade to local trees and block heavy rain this way as well. Or fill old tyres with soil, which you then compact, to create seating areas.



IDEAS MAKE AN OUTDOOR COMPASS

Creating a compass outdoors, especially where you have a view of the surrounding area, can ground learning about directions and bearings into the local area and allow students to interact with the compass itself.

SUGGESTIONS:

Ask students to stand on points of the compass, starting simple and becoming more complex (e.g. ENE, WSW). Use compass with a local map to write place names next to compass directions. Ask students to make a line along a compass bearing if they have a certain thing in common e.g. everyone with an older sister line up in a SW line. You can also add degrees to the circle to help with learning about bearings, angles and geometry.



IDEAS CREATE A MAP WITH STUDENTS

Mapping a country or a region outdoors creates an interactive display that can be added to and improved upon over time. Students can refer to it during outdoor lessons, as well as incorporating it into imaginative play during break-times.

SUGGESTIONS:

Ask students to identify features on the map by coming and standing on or by it. Get students to add to the map with further features using local materials such as different foods that are grown in a country or by adding stones to represent human population sizes and population density etc.



IDEAS BUILD A TOPOGRAPHICAL MAP

Landform work can come alive through using local materials to show Geographic features and processes, such as erosion and deposition. Using a local example of a landform that pupils would know makes this even more engaging.

SUGGESTIONS:

Ask students to identify the feature and the different landforms present. Explain contour lines using the feature and ask students to create their own 2D map with land-use and contour lines of the feature. Or, ask students to get into groups and create features with their bodies such as valleys, plateaus, mountains and ridges.



IDEAS CREATE NUMBER LINES AND 3D MATHEMATICAL DISPLAYS

Some pupils find abstract mathematical concepts difficult to grasp. By making a 3D version of a concept, such as negative numbers, and getting students to interact with with it, they will find it easier to understand.

SUGGESTIONS:

Ask a student to stand on a number on the line. Get other students to ask them to add or subtract numbers by walking left or right along the line. Make it fun by having one student at each end of the line and asking students to create a sum that makes them meet on a specific number.



IDEAS USE NATURAL FEATURES AS PLAY AREAS

Many schools have their own natural features such as rocks, trees, slopes and shaded areas. Make the most of these by creating a play area for children to explore, use their imaginations and have fun on during break-times. This will help foster imaginative play, and encourage creativity.

SUGGESTIONS:

Areas such as these are not only useful for play, but can also be used during lesson times. You can use these spaces to enact and dramatise topics, as well as for problem solving tasks and group work. For instance, if learning about a cultural story, use natural features to create a mini-play or drama about the event as you read the story together. Or use circles of trees as a story telling space and a natural amphitheatre.







IDEAS PLANT TREES

A way to combine both active learning and developing your school site is to get everyone involved in planting trees. Increasing the number of trees at your school brings a variety of benefits, including creating spaces for outdoor learning, providing protection from the sun and wind and engaging students in environmental issues. Not to mention the practical skills that students will gain through being involved in the planting and nurturing of trees.

Start by making sure that any planting is integrated into your school plans and that you have considered things such as wind direction, the path of the sun across the sky, soil types and water availability.

Get advice from a local forestry specialist or knowledgeable parent on what to plant and where if you can.

The website, www.greeninguganda.org may also be a good place to start.

You may already have some trees growing on your site that can be utilised further for shade or as areas to carry out group work outside of the classroom. Begin encouraging the use of these spaces by staff more, if you have them. Director of Education Standards in the Ministry of Education and Sports, Dr. Kedrace Turyagyenda:

"I commend schools to prioritize environmental protection as a key recommendation for good education standards... and I encourage you to scale out forest education to more schools, more communities and more regions of Uganda, to challenge them to think about planting trees and conserving the environment".

Uganda's forests are severely threatened. Between 1990-2010 the country lost almost a third of its tree cover, and tree numbers continue to be under threat each year. Thankfully, there are now efforts to counter this through tree planting initiatives and by doing your own planting your school can join in with this national movement.





IDEAS PLANT TREES

To facilitate outdoor learning and group work, you may wish to think about creating semienclosed outdoor classroom areas using circles, crescents or lines of trees – bearing in mind the wind direction and movement of the sun. Planting trees for shade and as wind breaks will provide areas that are naturally inviting for children to make use of and congregate under and they can also de-mark the different areas of your grounds.

Trees can not only provide shade and shelter, depending on the species, they can also offer many other benefits to your school.

Consider how you may wish to plant trees for these various uses:

Fruit for nutrition – some students may be under-nourished and the provision of fruit at school can help combat this. Consider also planting the fast growing Moringa oleifera to add their nutritious leaves to school dinners.

Fuel-wood - institutions can spend around 20-30% of the total school budget on fuelwood. Growing your own can free up school budgets for other things. Calliandra calothyrsus is another fast growing tree/shrub that can provide fuelwood and fodder, as well as being a good nitrogen fixer, or Gmelina arborea is also a good option.

Wind breaks – not only can trees reduce the breeze for pupils trying to learn, when placed at the correct distance, windbreakers can protect school buildings from damage by strong winds. These trees need to be robust and not lose branches easily - Markhamia lutea or Maesopsis eminii are native trees that can be planted as windbreaks.

Shade – giving shade from the harsh sun can help students to focus on their learning and tracking the sun across the sky during the day as you plan for planting shade trees is a great activity in itself. Consider planting a mixture of local shade trees (e.g. Umbrella trees or Mango trees), alongside Neem trees, which grow quickly and have many medicinal benefits, as well as deterring mosquitoes.

Play – often overlooked, play is at the core of learning. By encouraging play using trees planted in shapes or grids, you can create living playgrounds – not to mention those trees that are best for climbing. You could use small trees and shrubs for this planting, or lines of lemon grass.

Provide learning opportunities – pupils can actively learn about the different species of trees, their uses and about the lifecycles of plants throughout your planting project.

Reduce effect of floods – trees soak up flood waters and bind the soil, reducing the loss of precious topsoil. Plant trees in any areas of your site that are susceptible to flooding to reduce the impact of heavy rains.

Please note, the trees suggested may not be appropriate for your region of Uganda. Local experts should be able to give you the information you need about the best species to plant for your locality, the spacing needed and when best to plant. It may be that as well as purchasing trees, some pupils could bring in saplings and seeds from their home gardens to donate to the school. You might also wish to encourage children to plant fruit seeds in specified areas of your school grounds after they eat fruit. When it comes times to plant, it is a good idea not to plant your tree saplings or seeds all at the same time but to stagger the planting by a few weeks to spread the risk of poor rains. In addition, ensure that your saplings are protected from trampling by livestock or students by surrounding them with sticks in the ground and add a mulch around the base to protect saplings from drying out. Whatever you choose to do, make the most of the people power at your school to help with digging, watering and weeding. You could also keep students engaged by allocating certain areas of trees to different classes to look after during term time and having 'Tree Monitors' - making tree planting a truly active learning experience for environmental stewardship.



IDEAS MAKE A WEATHER STATION

Using actual weather instruments to measure rainfall, temperature, wind direction and wind speed makes this topic come alive. Instruments can even be made by the pupils themselves and assessed for accuracy.

SUGGESTIONS:

Appoint termly weather monitors who report their daily findings to the class and add to a weekly weather chart. This gives scope for creating termly graphs of various types and exploring variations and averages. Students could also be asked to create their own rain gauges out of old bottles for use at home to compare results.



IDEAS RE-CREATE LOCAL BUSINESSES

To enable students to deal with real-world situations, it can help to re-create settings that children will recognise from their lives. These structures can also be used in acting out dramas to aid health and social education sessions.

SUGGESTIONS:

Role play different everyday life situations using the stalls. These could include buying and selling goods and working out the change needed; giving pupils real goods to sell to other pupils at lunchtime and acting out a role play about behaviour using the stalls as props.



IDEAS BUILD SEATING AREAS

Create seating in naturally shaded areas to help with more structured outdoor learning. Make use of existing features such as trees, logs, rocks and water tanks. Ensure that students can move freely between the seats so that you are able to invite them to come out to the front as you teach.

SUGGESTIONS:

Split a lesson in two by having half indoors and half outside. Use the indoor space for explanations and diagrams and when outside, make use of the landscape and features to facilitate a more active learning session. Allow students to do group work in the seating areas and encourage them to use natural materials that they can find on the school grounds in their work.



IDEAS CREATE A MAP OF YOUR SCHOOL

It is useful for students to know their school well if you are to make changes to it. By being involved in creating their own map of the school using local materials, students will have more of an idea of what can be improved and what they already have on site.

SUGGESTIONS:

After creating your map, ask students to stand where their favourite place is and tell you why. Ask them to tell you what they don't like and why as well. Then ask them to work in groups to re-create their own map of the school and add the changes that they would make if it were their school.

STARTING A PROJECT STAGE 1 WHAT DO WE ALREADY HAVE?

Now that you have seen various examples to inspire you, consider what you may want to do in your grounds to improve the Active Teaching and Learning in your school. The first phase of the process is about finding out what you already have, how the space is currently used and how children feel about it. Then discover any technical or legal constraints that exist.

Key questions you should ask during information gathering:

- How do we feel about our school grounds?
- What kind of responses do people have, both positive and negative?
- What assets do we have access to in and around the school? (rocks, tree saplings, old jerry cans, people, skills etc). It is a good idea to run an Asset Mapping exercise (see following pages), to fully list what materials, people and features you already have.

By asking people what they think about the physical aspects of their grounds and how they use them, you will start to open up discussion about how they feel about their space and what they already have.

- How do you use the grounds? What activities take place on the grounds at break-time, during assemblies etc?
- Do you have a Master Plan for future developments of the site? Do your new plans fit into this?
- What existing features, such as rocks, trees, food crops and channels, could be utilised?



As well as doing a survey of your site, you will need to collect information on any legal, technical, and financial issues that may affect the changes you wish to make.

For example, you may need to confirm who owns the land (is it the church or government?), whether there are any restrictions on use, and who is responsible for maintenance.

STARTING A PROJECT

ASSET MAPPING EXERCISE

A good way to find out what you already have within your school and local community is to run a Capacity Inventory and an Asset Map. You may be surprised to find that much of the help that you need for your school can be found in either people or in the local area. It is a good idea to start with yourselves first as a reminder that there is a wealth of gifts and skills within the people who make up your school.

Capacity Inventory

The starting point for this exercise is the idea that everyone is able to benefit the school community in some way, from the youngest pupil to the Headteacher. Begin your Asset Mapping by asking these simple questions of the students and staff at your school, including ancillary staff such as cooks and groundkeepers. Encourage participants to share their answers in pairs or in fours and make sure that you share some of these with the wider group.

Talents

Talents are gifts or abilities that we are born with. We may develop them, but no one has to teach them to us.

- What positive qualities do people say you have? If you are not sure, ask a friend or colleague now.
- Who are the people in your life that you give something to (time, help, joy, knowledge etc)? How did you give it to them?
- When was the last time you shared with someone else? What was it?

Skills

Sometimes we have talents that we have acquired in everyday life such as cooking, telling stories or fixing things.

- What do you enjoy doing?
- If you could start a business or a hobby, what would it be?
- What do you like to do that helps people or that they might pay you to do?
- Have you ever made anything? Have you ever fixed anything? Have you ever solved a problem?

By asking the previous questions, staff and students should be more aware of what they are good at and then hopefully will have learnt something about a friend or colleague. In the context of developing your school grounds and creating some new spaces, it helps to follow with the next exercise which highlights how an individual can contribute to the school community.

We often only praise academic results and performance, whereas a community needs to utilise a range of gifts from everyone to function well. You will need people with each of the following gifts for a school grounds project. Ensure that when you are including participants, you have a mixture of students and staff with different gifts involved.

Draw three circles that overlap as a Venn Diagram with the following words inside. Ask people to consider what gifts that they have and then write those words in each circle. Encourage them to invite others to suggest words that describe them and add those to the circles if the participant agrees with the word. This activity will enable learners to see themselves and their contribution to the school community as valuable and it will help them to identify how they may be able to take part in any development projects.

Gifts that I can give my school community

GIFTS OF THE HEAD

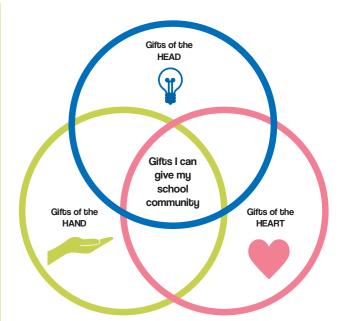
(Things I know something about and would enjoy talking about with others, e.g., history, local culture, maths, birds).

GIFTS OF THE HAND

(Things or skills I know how to do and would like to share with others, e.g., carpentry, sport, gardening, cooking).

GIFTS OF THE HEART

(Things I care deeply about, e.g., protection of the environment, community life, beauty).



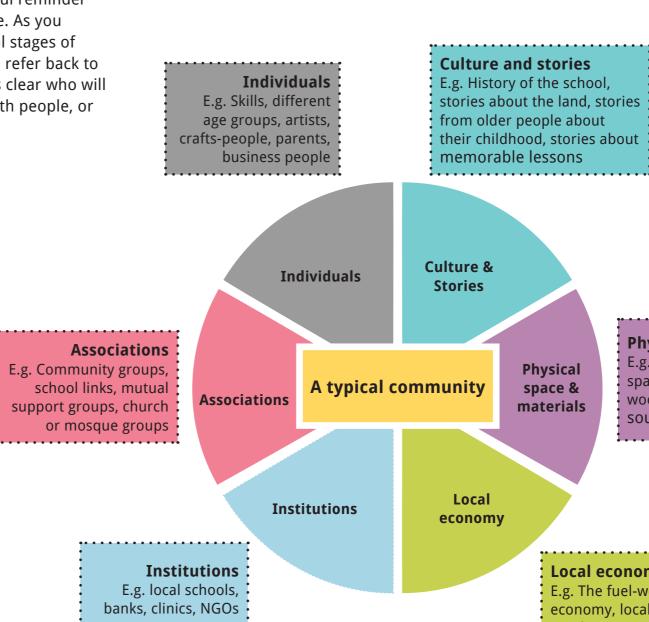
STARTING A PROJECT YOUR COMMUNITY ASSET MAP

To get more of a picture of what your school and community assets are, complete this useful activity that lists your local resources.

It will show you the strengths and opportunities within your community and inform your project activity plan. Listing out assets in this way highlights potential partnerships with parents, community groups, businesses and local institutions. For instance, if you identify that there is a local SACCO community group that has had training in gardening, you may wish to invite some of the group members to help students with developing your school gardens. In addition, you will identify your natural assets, which can contribute to all areas in the development of your site.

Using the format shown, as a group of stakeholders (including children), fill in the types of assets that can be found in your locality under each of the categories. You will need to name people, as well as groups and features - try to be as specific as you can to help with your action planning. It is important to have a variety of community members contributing to filling out your Asset Map so that you are able to capture information from a variety of sources. For example, you may find that older members of your community may remember relevant cultural stories about your area or recall how the school site used to be covered in trees.

When you have filled in each category together, use your Asset Map to prompt discussion about potential opportunities and use it to think about how each asset could help to achieve your project outcomes once they are agreed. You can also have it on display at your school as a useful reminder of what assets you already have. As you enter the planning and practical stages of the project, make sure that you refer back to your Asset Map and ensure it is clear who will follow up on making contact with people, or utilising resources.



A SAMPLE COMMUNITY ASSET MAP

Physical space & materials Physical space and materials

E.g. Land areas, agricultural spaces, soil, rocks/boulders, wooded areas, views, water sources

Local economy

E.g. The fuel-wood economy, local shops, main employment, village savings groups, credit unions

STARTING A PROJECT

STAGE 2 HOW DO WE WANT OUR SCHOOL TO BE?

The aim of this stage in the process is to develop a shared vision of what you want your outdoor space to become over time. Ask stakeholders to 'dream' about their perfect version of the school and draw it out, then compare the drawings.

What should go into your vision?

Start with the vision of how you would like your school to be. Think about how you would like it to feel for pupils going to the school and what they say they learn there. Listen to pupils, teachers and parents alike.

Include the feedback from Stage 1 that you gathered, as it will help form your vision and keep costs lower by using local assets.

A clear vision sets out what outcomes you want from the project (rather than just the specific design solutions). This will help guide the project in the right direction - you may wish to write a short vision statement at the end of this stage to help with this.

Your desired outcomes might include:

Advancing 'Active Teaching and Learning' within school

Solutions to problems relating to the existing site

Meeting needs which the school have identified

How those involved will benefit from the process

What budget you have to work within



Even if you have a very small budget and all the work is being done by parent volunteers, it is still a good idea to develop a vision and a plan as it will help you to think carefully and question what you are seeking to achieve and why.

STARTING A PROJECT STAGE 3 HOW DO WE GET THERE?

The aim of this phase is to develop a structured Activity Plan for the changes you want to make and really think about how you are going to maintain your project.

Key questions you should ask during planning:

- What order do we want to do things in?
- What is a realistic timescale?
- What local assets can we use to save time and cost?
- What happens if the seating gets broken, who will fix it?
- Who is responsible for keeping things working and improving rather than getting worse?

Many features, like a garden, seating area or tree circle, can be planned with the help of students and parents, producing both imaginative and realistic results.

Your plans could be written down in the form of an activity plan table, or you could create a timeline on a calendar showing when activities take place. It is important that you plan lists all of the materials needed, as well as the people involved and the costs at each stage. A good plan also has a review stage where you look at what went well and what you could do better to help you with the next phases of your project.

Engaging pupils:

If you are handing over to a particular project manager, it is still a good idea to keep children engaged by including them, giving them roles and asking their opinions on plans and ideas. You will get a host of imaginative ideas to help solve problems, encouraging critical thinking, and you will help create a sense of ownership that will protect the work from future damage.



Model making or 3D map making is one of the most effective techniques for engaging children in this process. Children are often highly inventive in creating models of their 'dream' school grounds. The most useful ideas can be gained from asking children to explain the thinking behind their creations and tell you why they have included specific features.

STARTING A PROJECT STAGE 4 MAKING THE CHANGES

This stage is all about enacting your plan towards your vision and outcomes. Try to involve as many members of the school community as you can, especially children. By the end of this phase you should have improved your outdoor space and be ready to think about future changes.

The nature of the work, and the level of expertise that is required will determine who undertakes it. If you are using contractors, keep a photographic record of work in progress – this can be useful in case you become unhappy with any aspect of their work. Depending on what changes you are making, you may wish to set aside whole school improvement days or weeks to get everyone involved in what you are doing.

You may find that you have parents and others associated with your school or setting who have specialist skills that they can contribute, such as artistic, gardening or building skills.

This may not come up until they see the work being carried out. So, try and invite parents to your school to see for themselves what you are aiming to achieve.

Involving children and young people:

Some of the work won't be suitable for the active involvement of children, but it's important that they are kept informed perhaps by watching and recording work in progress, or inviting a contractor to come and talk about the project to an assembly.

It is important that health and safety is seriously considered when you have work going on or contractors on site. Ensure that all staff and pupils understand the risks associated with any tools and materials involved in the work.



KEY PRINCIPLES PARTICIPATION

There is a great deal of potential for your projects to benefit school life in many ways.

To help with this, consider being guided by the following principles and add some of your own.

It is very important that you think carefully about how you can involve your school community in any work to improve your outdoor spaces. As already mentioned, you will need to consider: parents, students, staff and friends of the school. By involving various 'stakeholders' in your project, you will gain advocates for the project and for ATL in the school.

Participatory exercises

Create a Venn diagram with circles showing each of your stakeholders, think how much help and influence they can be to your project and draw out how they cross over with other stakeholders.

Gathering ideas for your project is the first step in participation. New ideas will likely come from the students, but other stakeholders may also have good ideas from their own time at school or something that they have seen. Be open to all of the ideas at first and simply list them down from each group. Note down any that someone in particular is keen on, as it could be that they could lead on this idea.

You can go through the large list of ideas with your planning group now. Map out the ideas on paper, plotting them on a graph of how useful to your project objectives each idea is (on x axis) and how much effort if will take (y axis). Circle the ideas that you feel are both useful and achievable for your school.

Now you can take the selected ideas back to a group of stakeholders on pieces of paper (as pictures or words). Together, place them in order of when you would like to create them on a timeline that you have draw on a blackboard. Once this is done, add dates and months to your timeline. Now you have a basic action plan.





KEY PRINCIPLES MAINTENANCE

Projects nearly always look good and create excitement at the start of their life-time. But to see your work benefitting many students into the future, you will need an ongoing maintenance plan.

You will need to engage the key staff involved with school and site maintenance at the very start of any project, valuing their insight and contributions. They will also be aware of factors in the design and implementation of your project that may not be obvious to everyone, e.g. they may note a particular type of wood attracts termites or that certain items may be easily stolen if not properly secured. They will also be very aware that problems become more expensive the longer you leave them.

Sharing the load

Involving students in the ongoing maintenance of your project can help them to care more about its upkeep, and give them useful skills as an adult shows them how to construct, fix and maintain features on site.

You could ask students to apply for the posts of maintenance helpers, to work alongside any relevant staff or parents. Or you may wish to designate a whole class to be responsible for the upkeep or a particular project or feature. This could range from students keeping a garden watered and weeded, to fixing wooden constructions with a hammer and nail. Your school may already have a prefect system, and so you may wish to incorporate active maintenance into their roles.

To ensure that your project has a long lifetime and does not simply degenerate, maintain a regular monitoring schedule and fixing rhythm. You could do this on the first and last days of each term, or on the first school day of each month. Having this written on a blackboard and then checked off when completed may also help facilitate this pattern.







KEY PRINCIPLES CREATIVITY

At the heart of Active Teaching and Learning is the principle of creativity. Without it, things will always remain the same. Bring creativity into the heart of your project and you will soon see children come alive and surprise you with their ideas.

Helping children and adults to re-discover creativity can take a little practice if they are used to 'colouring between the lines'. Running some creative problem solving sessions with staff and pupils can be a good way to kick start this process.

Here are some ideas to get you started:

Give teams a design problem to solve and a limited number of materials with which to solve it. For example, 'classrooms don't have enough storage space?', then give students plastic bottles, old jerry cans, string, a blade and local materials to find a solution.

Take a topic that you would normally teach indoors. Challenge staff to use only materials that they can see around them to help teach their lesson outside. E.g. A Maths lesson using local seeds and stones in a marked out area on the ground to explain fractions and common denominators.

Ask students to work in groups and create their own learning aid for another class to demonstrate something that they have learnt. E.g. Students use local rocks, sticks and bare soil to create a mind map (or brainstorm) of the issues that lead rural people to migrate to cities.

Get students to identify an issue within your school grounds and ask them to work in groups to find three ways in which it could be solved. They could interview other students to ask what the issue is and bring ideas all together as a class, who then vote on the best solution.



KEY PRINCIPLES WORKING WITH NATURE

By using materials that are in your locality, you are already working with nature and reducing costs. There will be countless ways in which you can use trees, rocks, soil and slopes in learning. Walk around your site with some pupils and look at what natural materials or features that you have. See if you can come up with some ideas of how what you see could be used in learning activities, or help facilitate group work.

Outdoor lesson ideas using natural materials:

Using chalk, draw numbers, letters or answers to questions on the bark of trees at your school. Ask pupils the questions and tell them to find the tree with the right answer. E.g. Write the numbers from the seven times table on trees and ask, 'what is seven times nine' and so on. Students have to run to each tree to state what their answer is.

Create a very large X and a Y axis on the ground using sisal or string, with value markings along each using sticks. Get students to plot themselves on the co-ordinates, one at a time, on the grid as you call out values. E.g. 'Lorna, go to point 12,9', 'or 'Titus, go to point -8, 8'.

Use your outdoor space to get students working in groups during lessons. You can start the lesson indoors and then tell them to carry out a task outdoors for a certain period of time. Students will find their own areas to sit and discuss throughout your school grounds, next to rocks, under trees and amongst bushes.

Draw out the points of the compass on the ground with a stick or rocks. Add directions to local places, arrows to key landmarks, where the sun sets and rises, and wind directions to help teach local knowledge and points of the compass.

Draw an outline of your country using sticks, or a line scraped in the ground. Ask students to locate key features on the map (lakes, rivers, mountains, plains, cities etc.) and to stand in that place and wait there. Other students then search for natural items to represent those features. E.g. sticks for rivers, rocks for mountains, large leaves for forests and seeds for the cities.







This document is intended to highlight the opportunities of outdoor learning to teach children about the environment and to help them to co-create the spaces where they learn and play. School buildings are expensive and East Africa is blessed with a climate that is comfortable out of doors for most of the year, providing there are opportunities to shelter from the sun and the rain. Outdoor spaces are also healthier than indoors in terms of viral (eg. Covid) transmission.

We are very grateful to everyone who has contributed images, ideas and advice to be incorporated into this guide. We would encourage teachers from different schools to discuss and develop their own ideas about active teaching and learning in the outdoor environment and do let us know if you have found this guide useful or have anything you would like to add to it. We are happy for anyone to use the material within it but if you do pass it on to others in printed and digital format please reference the Feilden Foundation whenever you do so.

Good luck in creatively and actively using the outdoor environment to help with education!

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