## **Easi-Torches in the Early Years**



"Light play is particularly successful when children have the opportunity to control the light source. When they are able to do this, they are not only exploring concepts such as cause and effect-like pushing a switch to make the torch come on and off. They are also having some powerful control over emotional connections of anyone who is within their near vicinity. How often have you heard shrieks of delighted terror when someone has switched off the torch in the dak den? This is more than just controlling light, it is about connecting with and affecting the emotional states of others".

Alistar Byrce-Clegg

"The colour changing Easi-Torches are great for exploring light and shadows without the worry of replacing batteries or having a dim light. A perfect way of combining technology and science for early years children".

Carol Allen

Here are some ideas for using the Easi-Torches in the Early Years.



## **Mixing Colours**



## **Key Skills Development**

- Exploring and mixing colours in new ways (creativity)
- Develop motor skills (Physical development)
- Experiment with cause and effect through light and colour changes



## Language Opportunities

- Colour vocabulary
- Prediction language- 'I think...', 'what will happen if...'
- Descriptive language- related to textures and different effects



#### **Activity**

Explore and play with the torches to create different colours. Investigate with the children how the colours change and see what colours can be made by blending the different lights together. Introduce other materials, such as cellophane, coloured paddles or transparent blocks and discuss what happens to the light when it passes through these.

You could set up a simple light lab with white paper and coloured acetate sheets. Encourage the children to shine the torch through different colours and observe what happens when two or more colours overlap. Can they guess what new colour might appear and test their prediction. Take photos of the colour combinations and sort them into warm or cool shades.

#### Extend:

Explore colour mixing further and help develop critical thinking by introducing scientific concepts like transparency, opaque, reflection. Boost confidence to make discoveries independently.

#### Adapt:

Model changing the colours and get children to copy. Encourage them to use descriptive language to express what they see and feel.



## **Movement**



### **Key Skills Development**

- Develop gross motor skills
- Express themselves using movement, shapes and colour
- Explore scientific thinking about light and shadows



## **Language Opportunities**

- Movement words- stretch, sway, twist, wave, spin, crouch
- Positional language- under, across, besides, behind, in front
- Language of comparison- biggest, smaller, tallest, widest



### **Activity**

Play a game of 'Freeze and Glow'- when the torches shine a certain colour, children must complete a specific action. For example, blue might mean freeze, red hold a balance, and green means move around. Encourage the children to spin, wave, stretch, twist, and crawl. Use scarves or ribbons to swish and wave as they move. Watch how the colours and different fabrics catch the light of the torches and how their movements and props interact with the light. Exaggerate the movements to add excitement and focus. Observe which of their objects cast colours and which ones create shadows and block the light. This is great for physical development with large movements building strength in the shoulders, arms and core.

#### Extend:

Try playing a shadow dance game where the children take turns creating shapes in the light for others to copy. Play a range of music genres to support the different styles of movement. You might also follow the session with large mark-making by attaching paper to the walls. Children could copy and trace patterns or letters.

### Adapt:

Some children may prefer to watch first or explore smaller movements like waving a colour voile or moving their fingers in the light.



# **Shadow Play**



## **Key Skills Development**

- Spatial awareness- Children explore how positioning affects shadow size and shape
- Fine motor control- Holding the torch and manipulating objects builds physical coordination
- Creative expression- Making pictures or performances with shadows promotes imagination



## Language Opportunities

- Scientific words- shadows, reflection, light, colour
- Encourage children to ask questions, notice changes and test ideas using light, colour and shadow.
- Spark curiosity about how things work- what makes it light up? Why does the colour change? What makes the shadow grow?



### Activity

Project shadows onto walls, floors, or white screens. Explore how light interacts with objects and how shadows change based on the distance and angle. Encourage the children to step into the light and notice what happens to the shadows they are creating. Experiment with how changing the distance from the light affects the size and movement of the shadows. Then provide a tray of small toys or natural materials like leaves, sticks and shells. Let the children use the torch to cast shadows on each item. Let them mix the colours and overlay them to see what new colours they can make. Then trace around the shadows or photograph them to make a shadow gallery.

### Extend:

Combine items together to make different shadows. Children could also use their hands to create shadow animals for storytelling sessions. Introduce shadow puppets and make a puppet theatre to tell stories.

### Adapt:

Provide additional modelling to the children with recognising and creating shadows. You could create shadows for them to explore. Make science feel magical, engaging and accessible.



# **Enhancing Play in a Dark Den**



## **Key Skills Development**

- Social and emotional development Helping children to feel safe, relaxed and able to explore freely
- Imaginative play The torch becomes a prop for storytelling and adventures
- Turn-taking and collaboration- small groups play in the den communicating and making decisions.



## Language Opportunities

- Light & Shadow vocabulary bright, dim, dark, shadow, dull, transparent, translucent, opaque, darkness, light
- Colour themed colour, hue, tint, shades, bright, dim
- Movement words- flicker, flash, dance, move, beam, ray, glow, twinkle, shimmer, spotlight



### **Activity**

A dark den offers a safe, cosy space where children can engage their senses and immerse themselves in imaginative play. Adding the Easi-Torches to this space invites a new layer of discovery. The soft glow of changing colours helps create a calming atmosphere and stimulates curiosity.

Set up the dark den with textured materials, mirrors, glow-in-the-dark objects and the Easi-torches. Encourage the children to explore the space, discover the hidden items or use the torch to guide role-play adventures such as 'going on a night-time treasure hunt' or 'camping under the stars.'

#### **Extend:**

Use the torches as part of mindfulness activities and alongside breathing exercises to enhance deeper focus and more sustained engagement.

#### Adapt:

The Easi-torches can support sensory integration and emotional regulation. The enclosed space coupled with the calming effect of light, helps children manage overstimulation and feel more in control. Let the children choose the colour light they find the most comforting to give them ownership.



# Science and Exploring



## **Key Skills Development**

- Refine hand-eye coordination and spatial awareness
- Develop problem-solving skills and logical thinking as children learn how to manipulate light to create the desired effects
- Enhance early STEAM exploration



## Language Opportunities

- Develop language skills as children describe creations and explain ideas to others
- **Vocabulary** such as silhouette, projection, blocked, hidden, reveal, explore, investigate, discover, observe, question, create
- Questioning skills 'Can you explain....?'



### **Activity**

Use light to encourage children to test their thinking and make predictions- 'what do you think will happen when we shine the torch on this? Why?'

Offer the children the torches and let them take the lead. Will they search out dark corners to investigate, switch off the lights, or use the colour beams to spark imaginative play? Perhaps they'll even use the light to track down a runaway peg doll hiding under the reading area sofa! While dark dens make glow resources shine brilliantly, white pop-up dens provide the perfect backdrop for colour mixing with the torches and light play.

#### Extend:

Provide a range of resources for children to experiment with light. Old shoe boxes can become mini dark theatres for young technicians to explore with torches.

#### Adapt:

Add items to spark children's interest such as potion bottles filled with different materials like buttons, feathers, beads, or coloured water. Even the simplest potion bottle feels more magical when you give it a swirl and shine a light through it! Children can shine the colour lights and describe what they see.



## **Stories and Imaginative Play**



## **Key Skills Development**

 Promote communication, collaboration and social interaction as children share the torches in their play



## **Language Opportunities**

- Prepositions such as under, behind, through
- Feeling words sad, happy, calm
- Storytelling vocabulary
- Co-operative play and collaborative language development.



### Activity

A few storytelling possibilities:

- Read a story and encourage the children to retell it using the torches. Inspire them to create their own narratives and bring stories to life. For example, they could match colours to a story such as 'The Great Blueness' by Arnold Lobel.
- Bring the torches into small world play for children to get creative and retell stories in different ways.
- Create shadow stories and imaginative worlds by exploring different scenarios.
- They could also use the torches when role-playing superheroes. The torches will be great for them to discover secret messages or to find their way in the dark for secret missions or challenges.

## Extend:

Create a light picture on a blank canvas to make patterns and shapes and use these to tell stories and spark the imagination.

#### Adapt:

Talk about how different colours can represent feelings, show different times of the day, or illustrate a setting or season. Model how to change the colour of the torches to match different parts of a story and show how characters interact with each other. As the children build up confidence, they can use the torches to retell stories.



## Investigating and Sequences



## Key Skills Development

- Understand sequence and order such as 'first', 'second', 'last'
- Explore cause and effect
- Develop spatial awareness, learning about shapes, sizes and dimensions



## Language Opportunities

- Use shadows to learn about shapes and positional language
- Mathematical language such as 'more', 'less', 'same', 'in front of', 'behind', 'long', 'short'



#### **Activity**

A few investigate learning activities:

- Create a colour sequence action-based memory game or sequence actions such as turning the torches on, off, changing the colour to red or blue. Observe patterns and make rhythmic sequences with repeated torch flashes. Ask the children to predict what comes next in the sequence.
- Find objects of different colours and match the colour of the torch beam to them, describing and naming the colours.
- Place coloured objects in an order and then create the sequence with the torches. You could also do this by showing a sequence of colours with the torches and then children must find objects to match the sequence.
- Create light patterns by shining torches through stencils to create different shapes in a specific order.

#### Extend:

Make predictions, test theories and ask questions as they investigate how light works. Create light trails in a darkened space. The children to make patterns and simple sequences with the light for their friends to copy.

#### Adapt:

Introduce a pattern, such as moving the torch slowly from the left to the right. The children can follow the sequence and observe how the light moves.



## **Light Explorers**



## Key Skills Development

- Exploring light, transparency, colour and shadow
- Physical development motor skills
- Maths comparing shape, size and position of shadows



## Language Opportunities

- Scientific language light, shadow, transparent, translucent, opaque
- Naming of colours
- Language of cause and effect



#### **Activity**

Dim the lights or go to a dark outdoor area and demonstrate how to turn on the torches and cycle through the different colours. Have a range of interesting items available, such as items with patterns for children to shine the light through – colanders, translucent items – cellophane, iridescent boulders or radiant cones, and natural items – feathers, leaves. Invite the children to experiment by shining light through the different objects. Talk about what they notice. Encourage them to observe what happens when they move the torch closer to or further away from the object. Can they make the shadows grow, shrink or stretch? Can they create different coloured shadows? What happens if they shine a yellow light though a red translucent potion bottle? Wonder aloud and investigate how a shadow is made.

#### Extend:

Set up a 'Shadow Lab' with light resources such as torches, mirrors and light projectors. Can they practise using the light sources to make interesting shadows and patterns?

Add another challenge by asking children to explore mixing the coloured beams of light on to a white wall or in a white pop-up tent. What do they notice?

#### Adapt:

Use larger, high-contrast or textured objects (e.g. bold shapes, patterned acetate, or tactile items like netting and voiles) to make changes in light and shadow easier to notice. Give children the option to observe first and join in when ready, respecting different comfort levels with darkened environments or new resources.



# A Cosy Nook for a Reading Book



## **Key Skills Development**

- Encourages the love of books and reading
- Helps children to relax and regulate
- Encourages conversations about stories



## Language Opportunities

- Language related to books title, page, cover, author
- Emotions and feelings How the characters feel and the link to light
- Parts of a story beginning, middle, end, resolution, character, plot



#### **Activity**

Create a special reading nook for children who enjoy a quieter or more sensory reading experience. Use soft materials and resources to make it more inviting – a dark den, rugs, soft glowing cushions and blankets to create a cosy, enclosed feel. Use the Eais-Torches to add atmosphere and glow. You could include other light up resources if you have them, such as the colour changing Light Up Lanterns.

Show the children how they can use the torches to light up the pages as they read or change the colours as the story progresses. For example, turn the torches to blue if reading a story about the ocean or red for the story about the dragon. This cosy, softly lit book corner invites children to choose books, snuggle up alone, or share stories in a magical atmosphere that feels slightly different to the usual reading/book area.

#### Extend:

Invite children to become 'lighting helpers'. Can they identify different parts of a story or characters by changing the colour of the light to represent them? Get the children to set the scene using different colours to suggest moods, settings, times of day or seasons.

#### Adapt:

Offer a range of books such as sensory books, interactive books or audio stories so that books are accessible to all. Use the Easi-Torches to highlight parts of a page if children need support focusing in on certain images or text. Use the space to read a story before nap time.



## **Exploring Feelings and Emotions**



### Key Skills Development

- Managing feelings and emotions
- Self-regulation by creating a calming atmosphere and soft light
- Developing an understanding of how others are feeling (empathy)



## **Language Opportunities**

- Feeling words sad, happy, calm
- Regulation vocabulary taught through co-regulation
- Express feelings using non-verbal communication



### Activity

Set up a cosy, calm area with soft furnishings and with the Easi-torches. You may want to include a variety of other light up resources if you have them, such as Glow People, Glow Cubes or Glow Pebbles.

Talk to the children about the different feelings and emotions that we experience. Demonstrate how they can change the colour of the torch to match how they feel. For example, 'Red might mean you are cross or full of energy, blue might represent calm or a sad feeling. What colour are you feeling today?'

It is important to note that different colours will symbolise different things for each child. Discuss feelings and emotions, how they make us feel and times when we have experienced them. Talk about how feelings can change throughout the day and that it's ok. You can also choose different emotions, select the colour using the torch and discuss actions/events that can make you feel that way.

#### Extend:

Add a basket of books about feelings and emotions to the space. Invite children to pair a book with a colour from the Easi-torch – 'Can you change the colour to show how the bear is feeling in the story?'

## Adapt:

Use clear, visuals, feeling faces, mirrors or real photos alongside this activity to help link colour and feelings for children who need more support. Have conversations about feelings and emotions when the children are calm and settled so that they can calmly practise strategies when they feel safe.

