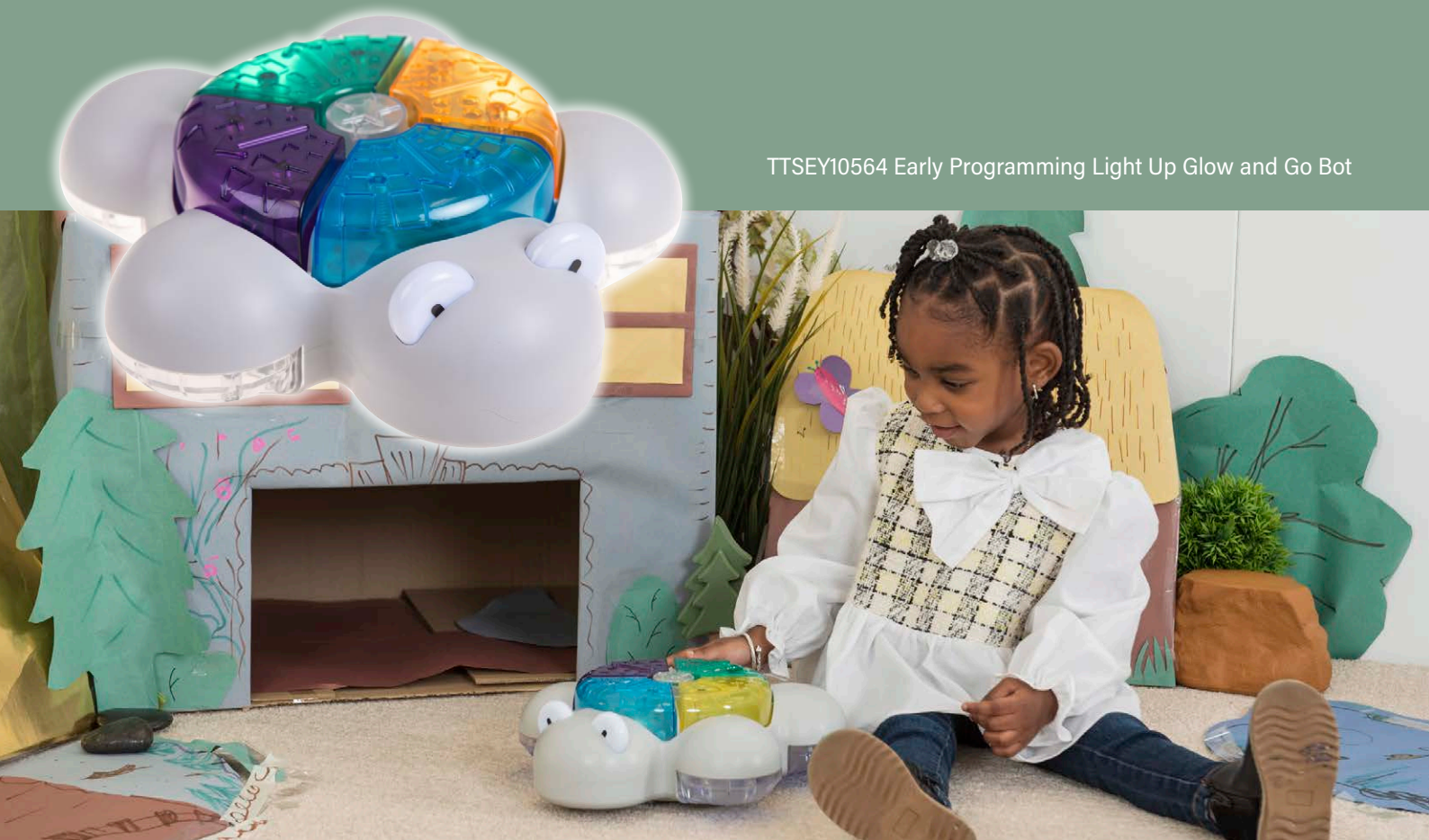
GLOW AND GO BOT

PRACTITIONER NOTES

Build a firm foundation of early technology skills through light, sound, texture and movement

- Cultivate a sense of curiosity
- Inspires rich and magical learning experiences
- Designed with young learners in mind
- Highly interactive and incredibly versatile
- Robust and rechargeable

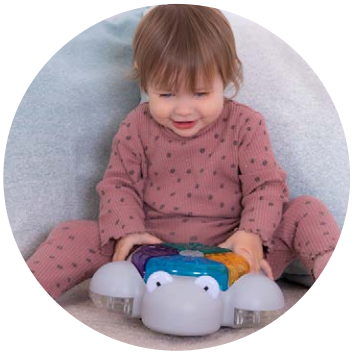


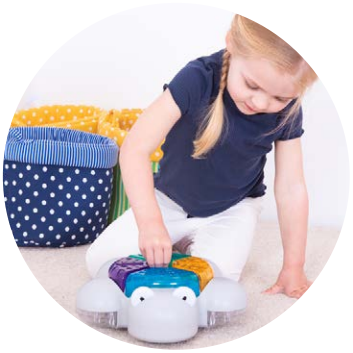
TTSEY10564 Early Programming Light Up Glow and Go Bot

GLOW AND GO BOT

This appealing floor robot is designed to interest and engage children of varying ages. It is safe to use from 10 months plus and has all the relevant testing documentation. It can however be used in many different ways, enabling babies to learn with it as well as older children who can choose to use it in a more complex way. It is specifically focused on children having a multi-sensory experience with movements, textures, noise, and visual effects. These all add to the holistic enrichment and add to the enjoyment as well as giving a sense of wonder.

Yes, we have utilised technology to support and enrich learning but, in an age, appropriate and contextual way. We have considered how a child will respond cognitively, emotionally, and physically to the challenges. The focus is very much on the supporting the curious, investigative child, making discoveries and connections. Technology is an integral element but is one of many facets. Children need to embed the foundation skills from which things can be built upon. They need time to consolidate and foster early, key skills. This little robot is about a play-based approach, where children can be independent, explore, make decisions, and ponder possibilities. The Characteristics of Learning from the EYFS convey how these fundamental skills are central to a child's learning. We also want the child to have fun and to be able to revisit this little robot over time and to play in a variety of ways. Learning is a continuous process and there are multiple ways this little creature can help support that.





GLOW AND GO BOT

Here are some ideas as to how the children may work with the robot. They are taken from our observations and from our educational partners. We know the children will have their own ideas and interests, so these are just insights to share with you. We look forward to hearing about your adventures.

DISCOVERY

- Some children may simply be fascinated by pressing the buttons and discovering what happens. Will the lights flash, the sound effects ring out or a particular directional movement occur? Children quickly learn to make vital connections and see that their action causes the effect. They are learning about stimulus and response.
- Even a very young child will love to make discoveries and to experiment with the robot. They may have it in the static mode, quickly realising if they want a particular sound, they must press the corresponding button. Younger children may love to simply create a reaction. They are learning about cause and effect, stimulus -response.

SCHEMATIC PLAY

- Some children may respond to the robot in relation to their schematic interest. They may enjoy things that rotate, go in lines, transfer positions, go under things, etc.
- This robot moves in a very literal way. If you press the right button, it moves right, if you press forwards, it moves forwards. This was designed this way as young children will think in this cognitive, literal way. As they grow this understanding develops and they gain a recognition of how to change directions and to make a planned route. The children can press the buttons and make a simple chain of commands, pressing the central button when they are ready.
- There is a dance mode that can be isolated on the Bot. Children will love moving around to this jolly tune. Use more than one robot to move in unison.
- The children can also work on their gross motor skills with the Bot. As he moves left, right, forwards, backwards or around, they can try and match the movement. They will really have to concentrate to mirror the direction. Try this the other way around with the child making a move or multiple moves, then another child has to match it with the Bot.

CONNECTION AND ASSOCIATION

- The children learn about cause and effect, how to manipulate and manoeuvre, navigating the Bot in specific directions. This Bot is not about precise movements, it is more about giving commands to move in specific ways. It is about discovering. Yes, they may be making a simple algorithm but the intention for the younger child is not about programming but more about experimenting, exploring, and discovering. As the child grows, they will learn about how to make specific planned routes and the simple programming element may become a part of the learning, but only when developmentally appropriate.
- As the children learn more about how to control the Bot, they want it to travel towards something or someone. You may have throw down spots that you aim it to rest upon. Can you work out how many presses it will take? Which direction does it need to go? Learn about prediction, estimation, counting and prepositional language.
- You may want to play find the sound. Can they remember which sounds button goes 'wheee'? The children learn to make associations and connections. They can do this with sounds, colours, textures, and movements.

SENSORY

- The Bot glows so it looks ever more atmospheric and appealing in semi-darkened environments. Imagine it in a Dark Den. It would work brilliantly in the Projector Light Lab with the glowing shadows as it weaves in and out.
- We tried the Bot on a mirrored, iridescent surface and the light effects really created a magical impact. We also hung up a disco ball and the light cascaded around as the dancing began. Try using the Bot in a mirrored Active World Tray (Tuff Spot). He could move a little and could rotate in the centre. We found that they loved the sparkle and we loved hearing the joy and the laughter.
- The effects mode can be altered with the change of a switch so that the sound is not always apparent. Adapt accordingly to the needs and interests of your children.

COMMUNICATION AND VOCABULARY

- What is the robot called? Where does he come from and what are his/her special powers? Create scenarios around the character. Enable the children to be more involved and take ownership.
- Extend the children's mathematical vocabulary with the number names. As they press the button, they learn about one-one correspondence. They learn about prepositional terms; under, though, next to, between, around, etc. Who can get the Bot closest to the chosen object or throw down spot? Are they near, far, a long way off, close too, etc? Some children would love to measure how close they got to their end destination using arbitrary and non-arbitrary measurements. Children tend to love to use tape measures and that way they can determine who got the Bot the closest to their intended destination.
- Some older children will love writing adventures around the character. Younger children may equally love to narrate. Use to enrich their vocabulary and language skills. Perhaps he starts off at a particular place and then travels to amazing places. He could meet the teddies, aliens, then some robots, go to the shop (made of blocks), visit a farm, and then return home. Home is perhaps a picture or a construction they have designed.
- Arrive to find the Bot with a mystery to solve. Read the instructions and take on the challenge. Perhaps today he/she takes on the role of superhero.
- Try him on a giant map, where will he travel to?

CREATIVITY

- Make a giant area for your Bot. It could be a large rectangle made up of Glow Bricks.
- Try covering the floor with paper so that the children can draw on it. They can develop stories and create an emerging scene. Perhaps they will draw a bridge, a secret door, a drawbridge, etc. This is great to document their adventures.
- You could have areas on the floor to avoid, such as a pretend swamp, a volcano, or a hungry crocodile. Let imaginations soar.

STEAM/21ST CENTURY SKILLS/PROBLEM SOLVING

- Can he go on mini adventures? Where will he go? The children could set out small world environments for him to explore and for them to create exciting narratives.
- Make courses for the Bot. You could get large boxes and it could go around or even through if you cut a tunnel through it. Perhaps it could be a familiar landscape, a scene from a story or one from their imagination. You may find yourself going through a forest, past a volcano, next to a dinosaur and over a pretend desert (made from card or paper).
- The children could sit in different places around the room. Can they try and get the Bot to move to the next person? This is really great for estimation and prediction.
- If you have more than one Bot, you could do matching activities. Both press the forward button, then the left, right and go. Do they do the same? Do they compare? You could also give instructions by the shades of the buttons or the directional arrows? Can you move four spaces forward then two back, then one left?
- You could adapt the target areas depending on the interests of the child. If you make your own mats, ensure they are more than 3mm thick and are not a slip hazard. Will he travel to dinosaur images, shapes, colours, characters, etc.?
- Make pathways for the Bot to travel on or through. Imagine if you had crates and make a kind of tunnel. You could add holes to the top and the light of the Bot would shine through. Estimate how many presses of the button it will need to clear the tunnel.
- Play snakes and ladders with the Bot. Simply make a giant board out of paper on the floor, get a large dice and move the Bot in the chosen direction.
- Can you design his home? What will it look like? Will it be a castle, a cave, a laboratory or even cottage? Suggest STEAM challenges. Can they design a place to keep him warm and dry? Can they goes design a route where he passed a farm, avoids the mud and buys an ice cream on the way?

How he is used will really depend on the age and interest of the child and the context. We were eager to have a resource that was pre-Bee-Bot, that moved in a literal way. It supports the vital need to foster and encourage children to be curious. We wanted then to be free to experiment. Younger children may simply be fascinated with pressing the buttons, hearing the sounds, and seeing the lights. As they grow the Bot may have more complex usage. It can be adapted to various scenarios. The sensory element to him is integral and the fact that he lights up and creates a vibrant, illuminated effect. This means he may well be used in sensory rooms and light labs or simply in a quiet corner.

We are grateful to have worked with Carol Allen, who is a leading international advisor for technology and inclusion. She was rightly very keen ensure that this little robot was accessible to all children, including those who may have severe, profound, and multiple learning difficulties. Some students may be more reliant on being able to touch things and feel textures due to having limited vision. This was a key factor for adding these specific lights and the sounds. Each section of the robot has unique patterns, effects, and music. It was also important to be able to use it in a static mode so that for students who may have restricted movement they could also access the learning. Carol assisted us in ensuring that the Bot had maximised potential for all children. Carol is also a great advocate for the use of creative technology to support learning and we are really delighted to partner with such an amazing pedagogue and children's champion.

We really hope that your learners have wonderful learning experiences.

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