

Kitt

THE LEARNING COMPANION

PLAY • LEARN • INSPIRE



SENCO GUIDE

Using Kitt to Support Learners with
Special Educational Needs



Introduction

Kitt, the companion robot, has been specially designed with a range of functions and features that will support all learners, including those with special educational needs and/or disabilities (SEND).

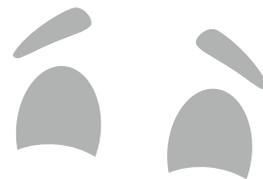


As the content on each Kitt can be curated by the teacher or individual child, Kitt is the perfect way to scaffold learning with one universal resource. Children can interact and work with Kitt to create their own videos, photos or audio files that will support them through the learning process, help them to build effective learning skills or allow them to capture and record their learning. In addition, adults have the opportunity to upload files onto Kitt that children can access independently to differentiate and support learning and promote wellbeing.

In this guide, we explore the features that make Kitt inclusive and accessible and the different ways that Kitt can be used to support learners with SEND.



All of the functions, features and possibilities make Kitt the perfect inclusive learning companion!



Kitt's Functions and Features

Inclusivity lies at the heart of Kitt's design.

With many different functions and features that can be tailored and personalised, such as vibration and voice prompts, Kitt becomes an accessible learning companion for children across a spectrum of needs.

Photographs, Audio and Videos



Children can use Kitt to take photographs or record videos and audio. They can capture their learning, record reminders and prompts or share their thoughts. As these are stored on Kitt, children can revisit and review them independently and share their recordings to showcase their learning.

By plugging Kitt into a computer, adults can easily upload files that can also be listened to or viewed on Kitt. These could be supportive learning resources, such as reminders, audiobooks, explanations, modelled examples, wellbeing prompts or a learning stimulus. Individual resources can be chosen and specifically shared to scaffold and differentiate an individual child's learning.

Voice Prompts with Double Touch



Within Kitt's menu there is the option to turn voice prompts on or off. When voice prompts are on, Kitt will read the name of the button when it is touched and read the names of the menu options as you scroll through. This will also activate a double touch function which will allow children to hear their selection with one press and select with the next.

Vibration



From the menu, Kitt's vibration feature can be turned on or off. When it is turned on, Kitt will vibrate to offer sensory feedback when stroked, lifted up or when buttons are touched.

Screen Brightness



Kitt's screen can be set at three different levels of brightness.

Timer



Kitt's timer can be easily set within the menu allowing children to monitor and plan their own learning time.

Alarm Clock



Children can set their own alarms for key routines during the day to help build independence.

Volume



Kitt's volume can be easily changed, depending on the sensory preference of the child or the noise level of the learning environment.



Companionship Features

Kitt also has a number of companionship features that help children to build a relationship with Kitt. Educational research shows that children's engagement levels are higher when working with a humanoid robot rather than on a screen.

These companionship features include:

Kitt Waking Up and Getting Sleepy



When switched on, Kitt will greet children by saying "I'm just waking up. Let's go."

Kitt will let children know when it is time for a battery charge by saying "I'm getting a little bit sleepy". Kitt's tummy will also turn blue.

Light



Kitt will respond when the light gets brighter by putting on a pair of sunglasses. This feature can be adjusted in the menu.

Dressing Kitt



There are little magnets inside that allow Kitt to be dressed so that children can 'look after' their robot, for example a coat to go home or pyjamas for bedtime.

Kitt's Eyes



Kitt's eyes will move and change to show engagement when listening to a child. Kitt has lots of different eye animations to observe, for example when stroked.

Stroked, Picked Up and Cuddled



Kitt responds to being stroked, picked up and cuddled by changing colour and through different eye animations.

Play Mode



Selecting the play mode will disable the touch buttons so that children can freely enjoy playing with and dressing up Kitt.

Personalised Learning

Every child can have their own personalised learning experience with Kitt.

If children have their own Kitt, adults can collate and share personalised learning resources and activities that can both support children to make progress towards specific SEN outcomes and also help to differentiate and scaffold classroom learning. Through having their own robot, children will build a rapport with their Kitt and will have individual access to the resources and functions available, such as the timer.

Blended Learning

Kitt can safely travel home with your learners to support learning both inside and outside of school.

All of Kitt's recordings can be accessed, watched, listened to and deleted on Kitt, and as a non-connected device, parents can be reassured that no information is being shared with an inaccessible location.



Supporting SEND learners

In this section, we explore different ways that Kitt can support learning across the curriculum, help children to develop their learning skills, support wellbeing and facilitate learning beyond the classroom. As children and adults spend more time with Kitt, they will find many more possibilities for ways to work with their personal learning companion.



Building Independence and Confidence

Kitt can play a valuable role in helping children to become confident, independent learners.

- By collecting together audio, images or videos, Kitt will become a hub of supportive learning resources for children to use independently.
- Prompts or step by step guides can be recorded onto Kitt and listened to as many times as needed to help children who find it difficult to remember task instructions.

Providing learning prompts in this way can support children to build their independence, achieve success with learning activities and believe that they can!

Organisational Skills and Routines

For many children it can be challenging to keep track of everything that they need to do or remember throughout the day. Routines and timetables can be a particular area of anxiety for some and having advanced warning can really help. As we try to build children's organisational skills, Kitt can be used to help children plan and review their day.

- Children can record a checklist of things they need to remember or a key routine such as getting ready for school. They can listen back to this for support rather than needing prompts from an adult.
- Kitt could also be used to record a daily timetable. Children can either review this throughout the day or use it at home to help prepare them in advance.
- Children can set an alarm using Kitt's alarm clock to remind them about an important event during the day, for example attending a meeting or remembering to go to a club.

Kitt provides children with a fun, supportive companion that they can use as they are developing these key life skills!



Modelling and Practising

Children need many opportunities to repeat, revisit and apply new knowledge and skills in order to learn and remember. Kitt can improve the quality and quantity of practice both in the classroom and at home.

- As the resources on Kitt can be curated by the teacher, they can be tailored to specific areas for an individual child. Kitt will become a personalised 'hub' of resources and activities that children can independently use to support their learning and increase opportunities for practice, such as images, rhymes, videos, explanations, or modelled examples. Children can review these as many times as they like and practise regularly to help them make progress towards their outcomes.
- Engaging in learning with a robot may offer the perfect motivation to encourage children to practise their learning more often.
- As Kitt does not require internet connectivity or access to a device, it is really easy for children to take Kitt home and continue practising there.

Kitt is endlessly patient. Explanations, instructions and activities can be recorded and played back infinitely if required without needing additional support from an adult or peer



Recording Learning

Some children really benefit from being able to record their work in different ways. As children can so easily record audio, video and take photographs using Kitt, they can truly take charge of capturing their learning.

- For children who find written recording challenging, Kitt offers an alternative way of expressing themselves. Kitt can also be used to scaffold written recording, with children first capturing their thoughts orally and then listening back as they write.
- Children can review their prior learning recorded on Kitt and use this as a starting point for next steps.
- Recordings and images can also be easily uploaded to a computer for the purposes of teacher assessment and feedback.

Through recording their own learning, children will build their independence and be able to celebrate successes, helping to build self-esteem and confidence.





Attention and Concentration

Kitt and his different functions offer an engaging way to support children who find concentration and attention challenging in the classroom.

- Children can set Kitt's timer to help them focus during tasks and be in control of managing their own learning time.
- Adults can also record task instructions to help children who find it difficult to remain focussed on multi step tasks. Children can listen back to these as many times as they like to be guided through the task one step at a time.

Motivation

The audio and visual feedback that children receive while learning with Kitt can be engaging and motivating for many pupils.

- Kitt's timer will help children to stay motivated with a task or activity. While the timer is on, Kitt's tummy will also light up blue to illuminate their learning.
- Technology can help to increase children's engagement and children may be more motivated if they are asked to complete an activity or record their learning using Kitt.
- Children's work can be easily shared, showcased and celebrated on the interactive whiteboard by simply plugging Kitt in to the computer.

Memory

As Kitt can record and store audio, video and images, children can use these captures to support and aid memory. We often need to see or hear something multiple times for us to remember.

- Children can use the audio record function to help them remember and rehearse things, such as tasks for the day, presentations or even practising lines for a performance.
- Using Kitt, children can revisit and review instructions, recordings of learning or explanations as many times as they need to retain the information.



Language and Communication



A key aspect of supporting children's language and communication is to provide as many opportunities as possible for children to encounter language. Kitt can help to increase the opportunities for children to listen, hear, explore and practise speech and language throughout the day.

- Making and listening to audio recordings will help children to use their spoken language, to broaden their vocabulary and develop their listening skills.
- Children can easily listen to and experience many different types of modelled language on Kitt through audio books, nursery rhymes, poems, etc. This will help to immerse children in rich language throughout their day.

Emotional and Wellbeing Support

As well as supporting with academic areas of learning, Kitt can also become a child's wellbeing buddy.

- Children can use Kitt to capture and record how they are feeling throughout the day. They can then share this with an adult as part of a social and emotional session if needed.
- Kitt could become a hub of wellbeing resources and emotional regulation strategies for children to use. These could include breathing exercises, mindfulness resources, calming music, audio books to listen to or videos to watch.
- For individual children who benefit from a link to home throughout the school day, Kitt could become a personal wellbeing resource. Children can upload pictures of family or record messages from adults at home that they can listen to or look at when needed.
- School staff can record messages onto Kitt about positive events of the day or things they are proud of so that children can share these at home.
- Children can also play with and look after Kitt as a relaxing, wellbeing activity including making different outfits or taking Kitt on adventures.

Kitt can be used to complement existing wellbeing strategies used in the classroom and help children to access and practise these.



Learning at Home

As Kitt does not require internet connectivity or access to a device, children can continue their learning by simply taking Kitt home with them.

- Instructions, resources and activities for home learning can be recorded and stored on Kitt. This can help motivate children and allows them to learn at home independently without requiring a lot of additional adult support.
- Children can use the recordings that they make at school to help them complete activities at home. This may also help adults to understand the best way to support their child. For example, children could record themselves explaining a new maths method during the lesson and then watch this with an adult at home.
- Kitt can also be used to record homework activities, such as listening to a story and responding to questions, recording reading or taking a picture of work completed on a whiteboard. When Kitt is taken back to school, adults can easily download these files.

Kitt opens up and expands the possibilities of learning at home by bridging the gap between school and home so that learning can continue beyond the school day.



Pupil Voice

Capturing and listening to the thoughts and feelings of children with SEND is so important when planning for their provision. It can sometimes be hard for children to express themselves and providing technology can help. Children may find it easier to talk to and record their thoughts onto Kitt so that they can share these, for example at SEND review meetings.

