

PLAY · LEARN · INSPIRE

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Inclusive learning companion for the classroom and beyond





Kitt the learning companion

"People are trying to work out how do we educate our children to take their place in the economies of the 21st Century? How do we do that given that we can't anticipate what the economy will look like next week... How do we do that?"

> Sir Ken Robinson, Changing Education Paradigms, 2008

Kitt is a companion robot designed to prepare your learners for 21st century learning.

As we transcend into a post-Covid education system and move toward Education 4.0, our learners require different EdTech to prepare them for their futures.

"65% of primary children will go on to work in job roles that currently do not yet exist."

OECD -The Future of Jobs and Skills, 2020

Whilst the future of industry remains relatively uncertain, there are some certainties that future thinking schools will consider in their curriculum planning.

In summary these are:

 Our children will need more than ever to become lifelong learners. Their adult life is more likely than the generations before them to require re-skilling and re-training as the world changes.

As a result, our children need to become independent, resilient learners, confident in their metacognitive abilities.

 Our children are living in a connected world. Our Year 1 students will not remember a time before smart home devices, connected speech

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assistants and smart phones, supported by at least 4G connectivity.

- The humanoid robotic market is predicted to accelerate in growth over the next ten years. As such our children must learn to comfortably live alongside robotic devices and feel confident in their ability to interact with machines.
- To thrive in adulthood alongside such tech, our children must nurture their human qualities. In a world assisted by machines, robots and artificially intelligent devices, we must complement this with creativity, compassion, communication, collaboration and critical thinking skills - 21st Century Skills.

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Kitt the learning companion

"The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn."

Future Shock, Alvin Toffler, 1970

Additionally, alongside these future facing challenges, schools have immediate needs that must be met.

- How can we meet the recovery needs of individual learners when every child will have had a different experience of education throughout 2020 and 2021?
- How can we support students living in digital poverty?
- How can we strengthen formative assessment evidence to support any future requirements of teacher assessments?
- How can we better prepare for blended learning in the future?
- How can we reduce teacher workload to allow them to spend more time with their learners?
- How can we better differentiate and personalise learning in the "new world"?



- How can we support our vulnerable, anxious and SEND learners as they transition back into regular school attendance?
- How can we excite our children about EdTech in our classrooms when they have spent a year learning through a screen?





Who is Kitt?

"Effective use of digital technology is driven by learning and teaching goals rather than a specific technology: the technology is not an end in itself. You should be clear about how any new technology will improve teaching and learning interactions."

EEF, Teaching and Learning Toolkit



Kitt, the learning companion, is a cross curricular companion robot for future facing schools. Kitt is able to support schools in providing a solution to the immediate issues facing school whilst simultaneously preparing children for the future.

Kitt is a non-moving robot. He is able to support learners in a variety of ways across all curriculum areas.

Kitt has an integrated camera, microphone and speaker, with all data being stored to a micro SD Card. He is not a connected device, he works as intended as a standalone piece of tech.

Kitt can be used in a wide variety of ways in the classroom, but as a companion Robot is able to support the learner in independently gathering formative assessment evidence through sharing



their learning with the robot. This can be done in a variety of ways, for example:

- Speaking to Kitt and recording an audio file – great for independent reading, tricky explanations that extend beyond the students written ability, singing, practicing practising phonics or pronunciation in MFL lessons, etc.
- Showing Kitt and example of work and taking a photo – great for written work, art work, completed D and T projects, numeracy work, etc.
- Demonstrating to Kitt and recording a video – great for demonstrating a drama piece, playing a musical instrument, conducting a science experiment, explaining a tricky concept with props, etc.





Who is Kitt?





Teachers are able to drag and drop files onto each Kitt for the individual learner. These may be:

- Images these can be viewed on the screen on Kitt's face. These could consist of Phoneme flashcards, Historical artefact images, images of famous paintings, images from around school to assist with transition into the next class, or images from home for anxious learners.
- Audio Files these can be listened to using the controls on Kitt's tummy. These could be pieces of music, poetry, an audio book, messages from out of space, messages from famous people of the past, or messages from home for anxious learners.
- Video Some concepts are best explained with a video, and Kitt currently supports videos filmed on a Kitt device. These could be video clips from around school, an explanation from a teacher, a message to a child studying at home from his classmates, etc.

In addition to supporting schools in gathering formative assessment evidence, Kitt has a number of companionship attributes which allow students to build a rapport working with the little robot. These include:

- Kitt waking up and getting sleepy when he has been working hard.
- Kitt responding to being stroked and cuddled.
- Kitt enjoying being spoken to his face will change to indicate this.
- Kitt knowing when it is sunny and putting his sunglasses on if it gets too bright!
- Kitt knowing when he has been lifted up and responding to this.
- Kitt supporting learners to concentrate, his tummy illuminates work and his timer feature can help children to focus on timed tasks
- Kitt also loves to dress up. He has magnets in his back to enable simple learner made clothing to attach to him with a push pin or a paperclip.







As non-judgemental and endlessly patient devices, robots are the perfect companion for learners with SEND. Kitt has been designed with inclusivity at his heart.

Accessibility features include:

- Fully customisable outputs vibration on/off, volume control, brightness control
- · Haptic feedback for sensory seeking students
- · Voice prompts for visually impaired students
- Timer to encourage focus and foster independent learning
- · Companionship features to promote self-awareness and self-care

As the content on each Kitt in the classroom is curated by the teacher, Kitt is the perfect way to differentiate for the class with one universal resource.

Kitt and blended learning

Kitt has been designed to support learning outside of the school. As we nurture lifelong learning skills, Kitt is the perfect companion to support learners wherever they are, in or outside of the classroom.

Kitt has been tested to travel using a range of carry cases available and so can safely travel home with your learners to support blended learning. He is small and light enough to fit in a bookbag or school backpack.

Kitt's battery will last for 8 hours of normal use when sent home. Single docking stations are also available for learners taking Kitt home on a regular basis.

As a non-connected device, parents can be reassured that no information is being shared with an inaccessible location. All of Kitts recordings can be accessed, watched, listened to and deleted on the device itself, without the need for a laptop, so any accidental recordings can be deleted.

For optimum hygiene, Kitt is made from anti-microbial plastic. Kitt has also been designed to ensure that he is fully











How can we meet the recovery needs of individual learners when every child will have had a different experience of education throughout 2020 and 2021?

How can we better differentiate and personalise learning in the "new world"? Kitt is a unique device that allows teachers to effectively personalise for each child without singling any individual out. The resources, materials and tasks set can be appropriate for the child without having to differentiate using more traditional methods, i.e. Tricky, Trickier and Trickiest worksheets.



How can we support students living in digital poverty?

Closing the attainment gap and learners living in digital poverty were both issues for educators long before the school closures of 2020 and 2021. Kitt is a stand-alone, non-connected device. He works without the need for a laptop, tablet, app or internet connection. Furthermore, he is pedagogically designed to nurture 21st century skills. Allowing Kitt to support in the homes of children living in digital poverty provides not only a positive link between home and school, but also nurtures skills for future prosperity, and supports learners' parents.

Kitt's long battery life also means that school would not need to draw upon a learner's home energy consumption to charge the device when going home for the evening.

Kitt can be used for a variety of blended learning experiences; from the simplicity of sending an audio book home to listen to before bedtime, to sending flipped learning activities or full lesson activities to support students working from home. The opportunities are limitless.

Kitt is a much more cost-effective intervention than a tablet device or laptop when purchasing on a 1:1 basis.

How can we strengthen formative assessment evidence to support any future requirements of teacher

assessments? With or without the requirement to provide teacher assessments in the future, effective formative assessment is at the forefront of outstanding educational practice. Kitt changes the emphasis of gathering this evidence from the responsibility of the teacher to the learner. In doing so the learner owns the evidence that they provide, develops independence and familiarity that comes from regular use of technology. All of these are necessary skills for a prosperous future.

How can we better prepare for blended learning in the future?

As a standalone device, Kitt is a unique proposition for blended learning. Removing the requirement of a tablet or laptop device, and a wireless connection, Kitt is able to deliver a unique personalised learning experience outside the walls of the classroom and without the need for extended screen time.







How can we reduce teacher workload to allow them to spend more time with their learners?

Embedding Kitt as a whole class or whole school approach brings significant benefits. In addition to developing independence and resilience, Kitt allows students to gather evidence of learning traditionally taken by the teacher.

Kitt allows students with SEND a more inclusive approach to learning alongside their peers.

Kitt is endlessly patient. Instructions can be recorded and played back infinitely if required.

Kitt allows teachers to make flipped learning fun, accelerating rates of progression in the classroom.

How can we support our vulnerable, anxious and SEND learners as they transition back into regular school attendance?

Kitt is the perfect device for children to transition back to school from long periods of absence. As a device that travels between school and home, it can help to build positive relationships between the two. Kitt can be used to record messages from classmates and teachers or from adults at home to support and motivate the learner through the school day.

Kitt is the perfect additional intervention for SEND students:

- Haptic feedback when stroked allows for self regulation of sensory seeking students
- Daily timer to remember events in the school day and foster independence
- · Endlessly patient personal device
- Timer mode to encourage focus
- · Play mode to encourage wellbeing and mindfulness



How can we excite our children about EdTech in our classrooms when they have spent a year learning through a screen? Kitt provides a significant opportunity for your learners to engage with a unique EdTech resource, which differs significantly from their educational experience of the past 12 months. As a lovable, personal character, he is able to offer much more than a screen. Instead, he can be cuddled, nurture emotional literacy, mindfulness and bring joy to the classrooms of the 21st century. He is a unique device capable of re-engaging learners with their education and preparing them for a future working alongside robotic devices.

> A whole school EdTech approach for 21st century learners

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