



STEAM

We scratched our heads trying to find a reason why school subjects should still be kept separated. We failed, so we started designing workshops bringing them all together.

We kept seeing STEM as a top priority, with the arts being neglected. If we complied, there would be no movies, no videogames, no thinking outside the box. So we adopted

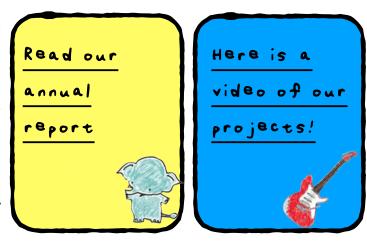
STEM + Arts = STEAM

When working with the little ones, we provide machines ready to interact with the physical world - did you know you could make a melody just by shaking hands? As the pupils grow, we show them how to build and customise a device. Later on, they code it and make it unique. As they transition into secondary school, they discover how to design, code and assemble a digital musical interface, which could only exists because they imagined it. One more step, a leap, we move completely away from the computer, to build a synthesiser with nothing but a battery and electronic components.

We come to your school to inspire the new generation of Makers; to develop resilience and to make them think 'I can do this'...at home, and for free.

We encourage them to think across disciplines, from design thinking and creative coding, to composition and performance.

We create effective communicators, able to interpret the needs of whichever career path they will one day embark on.



Choose your path

Year 1-2	How does it work?	pgs 3 & 4
Year 3-4	Now I get it, I think!	pgs 5 & 6
Year 5-6	Can I make it?	pgs 7 & 8
Year 7-8	I want it my way!	pgs 11 & 12
Year 9-10	Lead the way,	pgs 13 & 14

Year 3

My favourite
part was when
we made a
human
piano

FAQs

Year 4
This is my most interesting topic EVER!



Year 6
We really
enjoyed doing
this and we
want to know
more,
bye!

pg 15









How does it work?

Imagine holding an electronic device, as you squeeze it, the pitch changes, randomly at first, but then you start controlling it, little by little.

Some funny cables appear, the crocodiles, if you hold one and give another to your friend, you can make music by holding hands. Have you tried squeezing their ear? Try a hi-five - just don't slap too hard;)!

The crocodile is hungry, it likes apples and play doh. If you feed it, it will play for you. Ah, did we mention that it can play your drawings? Grab a pencil, let's listen to your imagination.

Structure of the 2 days

4 groups of 20+ students to receive $2 \times 1-$ hour workshops over 2 days. Priority to those from challenging backgrounds.

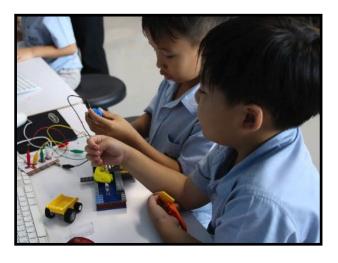
Lunch&Learn: 30' CPD for your staff during lunch.



I wish that this was part of a regular school day! It's not often my class go quiet in awe...and they did more than once during your workshop!!

Teacher, Mission Grove Primary

The content will evolve monthly, following the them atic curriculum (Christmas, Dinosaurs, Habitats, etc.) and the lesson objectives are based around



Development Matters. We will look also at Human-Computer interaction through very basic touch, control and awareness of self.

Legacy

You will have full access to our free teaching resources, with lesson plans featuring online technologies, explained during the *Lunch&Learn* CPD. This project runs in parallel with our Maths Music Robots 3.0 which will generate new content monthly.

Tech Requirements

Watch the video of a <u>sample lesson</u>.

- ⁻ 1 computer every 2 children (no tablets), headphones.
- Paper & Pencils
- Play Doh or Fruit/Veg
- Signed contract
- List of students (initials and challenging background)
- Google Chrome

Fantastic session with great input and activities, Everything was explained very well and was at a pace the kids could understand and follow, [I would like] extra sessions where the teachers could build what was taught,

Halemah Hoque, Eastbury Community Primary, Barking

88%

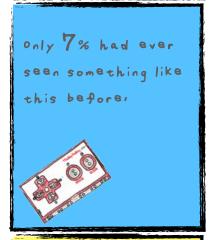
Of our students

planned to continue

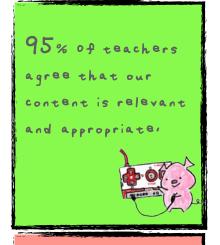
using our free

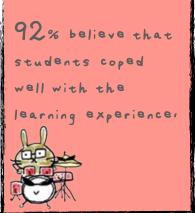
resources online

You are unlucky, because you are not doing this



It is a really cool
workshop, please
try this because it
brings music to a
whole new
level









Now I get it, I think!

You may have heard of Scratch. No? Not to worry, that's the beauty of block-based coding, anyone can learn the basics in just a few minutes. We take you to a website and combine some colourful boxes to make something happen. Now, with the addition of the Makey Makey, we can control such events through a physical device, similar to a video game controller. Whilst the controls are already very familiar to your pupils, its use of capacitive sensing allows us to talk about circuits, electricity, pitch, rhythm, singing, and even composition!

Structure of the 2 days

4 groups of 20+ students to receive 2 x 1-hour workshops over 2 days. Priority to those from challenging backgrounds. Lunch&Learn: 30' CPD for your staff during lunch.

Outcomes

Understanding of the different voices (Singing, speaking, etc.); Conductive materials and a Conductor in Music; MakeyMakey Hardware with fingers, crocodile clips, fruit and drawings; Linear circuits; Relative pitch; Basic rhythmic subdivisions and collaborative composition; Browser-based software which they can continue using, for free, at home;

A fantastic workshop that the children really enjoyed. They were blown away by the mixture of science, music and technology. All were completely engaged throughout and the staff were extremely helpful and enthusiastic.

Teacher, Whybridge Junior, Havering

Legacy

You will have full access to our free teaching resources, with lesson plans using online technologies, explained during the *Lunch&Learn* CPD. Check on our website, Facebook, Twitter or Instagram every Monday, for a new lesson plan! If you want more sessions, get in contact for a quote on our Discover, Explore and Bronze Art Awards.

Watch the video from some of our sessions.

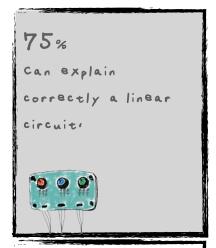
Tech Requirements

- 1 computer every 2 children (no tablets), headphones.
- Chrome. Please test scratch.mit.edu and click 'Create'.
- Paper & Pencils
- Signed contract
- List of students (initials and challenging background)
- Photo/Video policy.

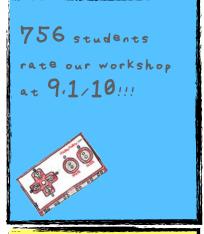


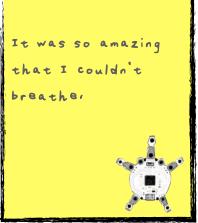
The workshop was a fantastic way of teaching children of all abilities music and science. It enabled them to see how electricity works and to see a different side of music. They left the workshop feeling really inspired! A brilliant experience.

Cecilia Maude, Crowlands Primary, Havering











It's really great!

Because you can

use this to help

yourself to be

good at

maths:





Can I make it?

There must be something magic to do with programming. Once a pupil creates a code, uploads it to a physical machine, and witnesses its effect on it, their eyes become the biggest we have ever seen, their mouths stuck open in awe.

This workshop uses the Micro:Bit, with lots of lights and sensors (compass, temperature, magnetometer, buttons, etc.), all of which can be used to create a smart musical instrument. We learn how to develop a linear workflow, to troubleshoot and test it, whilst developing resilience and boosting self-esteem. Yes, you can make it.

Structure of the 2 days

4 groups of 20+ students to receive 2 \times 1-hour workshops over 2 days. Priority to those from challenging backgrounds.

Lunch&Learn: 30' CPD for your staff during lunch.



I enjoyed the sessions more than the children and they loved it! A great introduction to coding!

Victoria Davies, Teacher, Thornhill Primary

Rotherham

Understanding of basic sensors like light and temperature; relative pitch and rhythm; using sensors to compose music; collaborative composition and performance.

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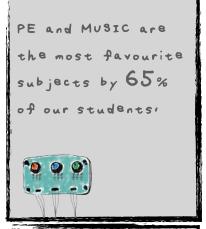
Tech Requirements

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- List of students (initials and challenging background)
- Paper & Pencils
- Chrome
- <u>Signed</u> contract
- Photo Video policy.



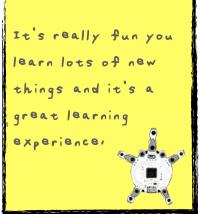
The workshop was fun and engaging, All the children were able to use the technology and were fascinated and proud of what they could achieve,

Teacher, Oasis Academy Connaught, Bristol









CM have delivered excellent workshops today. The standard of content and teaching has been exceptionally high! Every child has been fully engaged in the activities delivered.

Furness Primary School, Brent

Combining IT, art, DT, science and of course music, the Conductive Music workshop was a truly holistic learning experience. The sessions were challenging, engaging, and very different from anything our students had experienced before.

Ali hinds, Head of Music, Stepney Green Maths, Computing and Science College

I was very impressed with the organisation of the day. Even when faced with some technical problems from the school's side, adjustments were made with no fuss. Friendly, helpful staff and clear delivery. Excellent.

Castleton Primary School, Sunderland

Exciting session which engaged all students and staff involved. We want to continue experimenting with fruit-based instruments.

Paul Ibbotson, Lead Teacher of Maths, Oakfield Lodge School, Bristol

Year 3

Today was

fantastic, the

best day of my

Year 4

I want to touch
people's noses
[to make music]

Year 5
I LOVED IT AND
IT WAS
AWESOME

Year 6
This workshop
was very fun
and really
interesting

info@conductivemusic.uk

[We] partnered with Conductive Music and so far it has been a big success. We've received positive feedback from schools and the sessions we have observed have been highly engaging, informative and creative. The combination of music, science and technology is unique and an excellent way of bringing subjects to life and demonstrating how things work in the real world.

Alison Porter, Project Manager, THAMES

Conductive Music brings a new dimension to our offer for children in Camden, and attracts a different group to our Service. The courses have been well-received and we have excellent feedback from parents about the experience.

Deborah Rees, Deputy Head, Camden Music Service

Working in partnership with Conductive Music has enabled children and young people in Waltham Forest to have access to opportunities to engage with music technology in a fun and original way. The workshops and holiday courses have been both enjoyable and educational, and have connected with young people from a diverse range of backgrounds.

Mary Mycroft, Head of Service, Waltham Forest Music Hub

Fantastic to observe children being creative, spontaneous and confident in their exploration of music composition and performance.

Kevin Rivett, Head of Service, Calderdale Music Trust

Year 7
Cool, fun,
educational,
helpful and
inspiring

Year 8

Concentrate

and never give

up: Work hard

to succeed:

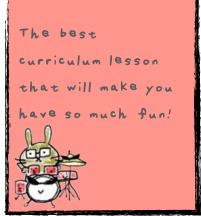


Year 9
Amazing, fun,
fantastic and
worth it



Year 10
Brilliant,
fabulous,
marvellous,
great tech
workshop









I want it my way!

Digital musical instruments are fun - you plug them in and, immediately, you can pluck marvellous sounds out of thin air. This workshop will take you a step further.

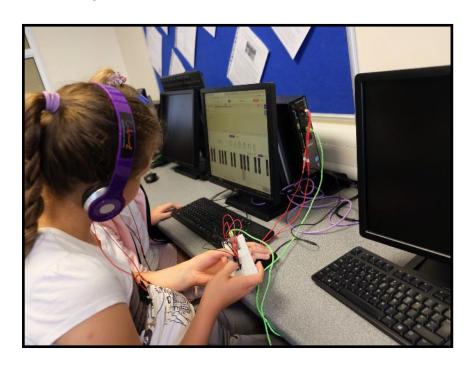
We have invented a way to build an instrument easily, and from scratch. We use a chip, called the Teensy, we set it on a breadboard to then connect buttons and sensors - think of them as light switches and dimmers. Everything comes together through wires, not unlike a game of Battleship: A5 to C3, etc.

Once the skeleton of the instrument is ready, we can incorporate it on any <u>cardboard structure</u> we can imagine.

By the end of the first day, we will have a series of unique, personal, satisfying instruments. On day two, we will use them to compose and perform a new song.

Structure of the 2 days

1 Group of 20 students across the 2 days (we will follow your timetable to avoid disruptions). The first day is split in Design, Fabrication and Testing, whilst the second focusses on Composition, Rehearsal and Performance. We also offer a free 30' CPD for your staff during the lunch break, called Lunch&Learn. It focuses on how to implement free technology in everyday lesson planning, across subjects.



Understanding of linear circuits, discreet and continuous sensors and conductive materials. Fundamentals of digital composition on a free, browser-based music software. Group rehearsals and performance/showcase.

Legacy

All of our software is free to use - your students will be able to continue from home. You will have full access to our free teaching resources, with lesson plans using online technologies, explained during the *Lunch&Learn* CPD. Check on our website, Facebook, Twitter or Instagram every Monday, for a new lesson plan!

Watch the video from some of our sessions.

Tech Requirements

- ⁻ 1 computer every 2 students (no tablets), headphones
- Cardboard, tape and scissors
- Chrome
- Signed contract
- List of students (initials and challenging background)
- Photo/Video policy.



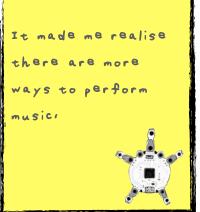
It was lovely to see our group of students engaged and responding well to the new technology. It was broken down so well that all students were able to engage and succeed in meeting the outcome of the workshop.

Head of Drama, St Gregory's College, Brent

only 12% had performed live before; 83% want to do it again!

It is really good and will help a lot with the GCSE.

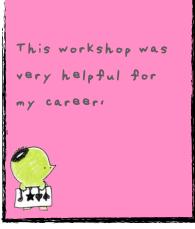
94% managed to build a fully functional instrument











Lead the way.

When you want to tap into someone's Maker spirit, there is nothing better than starting from scratch.

Away from computers, we explore with chips, sensors, too many cables, and breadboards. Trial and error directs us through this jungle of electronics, to discover our first sound - all analog, this is just electricity.

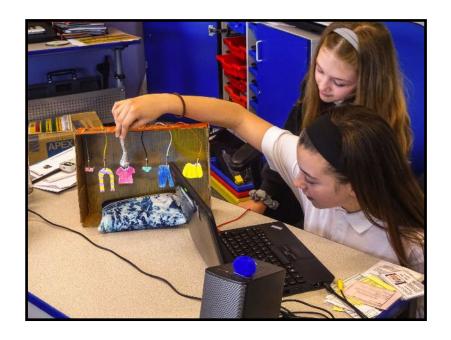
Basic at first, the sound will evolve as the instrument grows. Each group will develop independently. One might prefer pressure, sliders, knocks, flexi, or a combination of the sensors above.

When your own music awaits at the end of the task, everybody becomes interested in electronics - how does this work, why does it work, can you show me how you did it?

Structure of the 2 days

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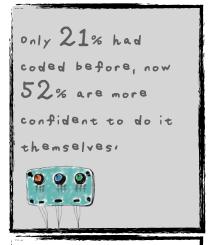
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- Cardboard,
 Tape, Scissors
- Chrome
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A really great opportunity for those involved. The students' work was of a high standard. They were able to take ownership and extend their ideas. It was a joy to watch. The workshop leaders empowered all to take risks and extend the ideas.

Y Teacher, Woodbridge High School, Redbridge



Exciting! I'll tell
everyone that
they should
definitely try it

90% are confident in creating their own track and 86% plan to follow up online

Cool project, hard working, imagination, creativity:

Is it free?

Yes, fully funded by Arts Council England and our local partners.

Typical structure of the day?

Primary: Arrival 8.30, sessions at 9, 10, 11, 12 (CPD), 1pm. End by 2/2.30pm *Secondary:* Arrival 8.30, start by 9am and then follow your entire school day.

Location?

At your school, ideally in a classroom or Computing suite. Please avoid large spaces as we require projector and speakers as a normal lesson. Once setup, we cannot change classroom during the day as our setup time is not negligible.

Which students and how many?

This funding prioritises those from challenging backgrounds. *Primary:* 80 minimum, *Secondary:* 20 minimum. If you have a smaller cohort, please inform us immediately. We can still deliver, but might need to restructure or re-staff

We are a Special School...

We are aware that each Special School is very unique. We suggest 4 x 1hr sessions pitched at 2 or 3 years below mainstream targets. We strongly suggest a brief chat to confirm the nature of your students' needs and the best approach. We strive to give them the best experience possible!

DBS...

Yes, all of our teachers are DBS checked and will bring it to the school with photo ID.

A word from our staff...





Their faces lit
up when they
saw the first
High-five
experiment

Emily is an absolute angel, lovely teacher who helped us throughout the days!

Kellyann is
always lovely,
helpful and
amazing, no
doubts there

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THANK YOU!