

# The NCETM Podcast Episode 69

## Grants for Maths Projects

Hello, and welcome to the NCETM podcast. My name is Steve McCormack [SM] from the NCETM's Communications Team, and the purpose of this episode is to draw attention to some charitable funding available for schools and to individual teachers to pursue a maths project close to their heart. The educational charity making the grants is called SHINE, and we'll be hearing from them in a moment. We'll also be hearing from a couple of primary school teachers who've received money from SHINE for their projects.

But first of all, let's hear from Eleanor Heathcoate [EH] from SHINE. Hello, Eleanor. Tell us a little bit, please, about SHINE, what it does and why.

**EM:** Hi, Steve. Well, SHINE is essentially a grant maker, and we are trying to improve outcomes for disadvantaged children. We're trying to level up the educational playing field with the grants that we give.

**SM:** Okay. And it's not just maths, is it? I mean, this conversation we're going to be having is maths. But it isn't just maths you aim at, is it?

**EH:** Yeah, it's not just maths that we aim at. We're focused on funding things that support English, maths, and science in particular, but we also do a little bit of work that falls slightly outside of that.

So, for example, we have a project that looks at how students regulate themselves and things like that. Because we know that sometimes in order for children to flourish in English, maths and science, sometimes there's a little step before that that we can make sure that things are in place so that then they can flourish in English, maths and science.

**SM:** Yeah, and if people go to your website (we'll give the web address at the end of this podcast) they'll see that you have a slight slant at the moment towards the north of England and towards disadvantage. But that doesn't mean you don't accept applications from schools and teachers in the south of England, does it?

**EH:** And that's partly correct. So we have two main grant streams available. So we have Let Teachers SHINE, and Let Teachers SHINE is really focused on finding teacher-led innovation, and that programme is open across England. But with grants we give, initially, we're looking to give those across England, but then we're looking for those projects to scale in the north. We want the scale to be focused in the north, because that's our focus as a charity.

Now, for our school-based grants, they are aimed and they are focused across the north of England. So we are looking for that northern focus for the school-based grants.

**SM:** Okay, fine. That's a very clear distinction. Can you give us an idea of scale, please? How many of these grants in a normal year do you end up giving?

**EH:** Yes. So with Let Teachers SHINE we aim to award up to ten new grants each year, spread over two years, and teachers get up to £25,000 to support their projects. For the school-based grants, the early years in transition grants, they can be anything up to around £100,000 and we award those throughout the year, so we have three **catches** throughout the year to take those grants through. And I would say we probably award maybe 20 grants each year.

**SM:** Oh, I see. That's quite large scale, isn't it? So if you take the two things together, the school-based grants and the Let Teachers SHINE to individuals, that's quite a large operation, quite an amount of money, which is great. Where does SHINE's funding come from?

**EH:** Our funding tends to come from donors or people that want to put their money into something good. And obviously, we know that education can make a real big difference, particularly to those children that are from less-advantaged backgrounds. So we have a lot of committed donors and the fans of SHINE also put funds into sustaining the charity.

**SM:** Great, thanks very much. I'm going to come back to you, Eleanor, at the end of the conversation for you to give us and to give teachers listening to this, some more details about how they can apply. But first of all, we're going to go to the two teachers who've received SHINE money and find out what they're doing. So, very briefly, first to Laura Jarvis [LJ] from a primary school in Bury in Manchester.

Hi, Laura. Just briefly, your school got one of the school-based awards from SHINE that Eleanor has just described. In brief, what do you do with it?

**LJ:** So basically, we applied for the Ready for School grant. The idea is it's a project called Parents Who Play and it's all about being able to break down barriers between us, school and parents at home, to be able to support parents with helping their child learn through play.

So we recognise through lots of research that we've done with our Early Years practitioners, that actually the input that parents give when the children **are nought to five** and the way that they are able to engage with their child's learning will affect their academic success in the future. So we host workshops throughout the year. We focus on reading, writing and maths, and we do a mixture of parent workshops and also get the parents into the classroom with the children to be able to build up positive experiences around school for the children with their parents.

And also, a lot of our work has been based on the relationship building between school and home because of the level of disadvantage we've got.

**SM:** Sorry, going to stop you. Going to come back and hear a little bit more in a moment. But first, introduce our other guest, Roy Clutterbuck [RC], also a primary school teacher, from Sheffield.

You've got one of the individual Let Teachers SHINE awards. Roy, just in a couple of sentences, what have you used that for?

**RC:** So I used it to develop a project called Lightning Maths. And the aim of Lightning Maths is to support pupils in the core number sense, understanding these are the targets that really they should have learnt by Year 2, but so many pupils across primary, they haven't gotten sorted and that's really holding them back. And I do that through a programme that tries to make maths engaging and accessible through some hands on, puzzle-based resources that I've designed myself.

**SM:** Okay, great. We'll hear more about that in a moment. But let's go back and dig a little bit deeper into your project.

Laura, your school's project, it's not an individual thing, it's a school thing. So workshops for parents. Parents of what age children specifically?

**LJ:** We're focusing on Reception-age children. But also when we scale up our project, we're going to be working with our nursery-age children as well because we have around approximately 100 children in our Early Years each year.

**SM:** So it's quite a big proportion of the children enrol. And briefly, when did it start and how long have you been doing it? Did you sort of put your toes in the water, so to speak, before you got the SHINE funding, which has enabled you to scale up? Is that how it worked?

**LJ:** We've always tried to do work with our parents, but the levels of success have been quite up and down, really. So we started the project in September last year, 2021. And then, so this is our second year doing it, and then we've also another school within our Academy Trust has started it as well this year. And then the idea is that a third school will take it on in Year 3 as well.

**SM:** I'm imagining you get the parents in to a workshop in a school classroom in the hall when after school evenings.

**LJ:** So what we did originally was it was within school time. The parents came into a workshop, and then the following week, the parents went into the classroom. And whatever the focus of the workshop was, then the following week, they were able to see it sort of in action in the classroom to see how their children actually did the things that we spoke about the week before.

But we quite quickly realised that in order to get an increased number of parents to attend, we needed the children to also be involved in the workshop because ultimately the parents are more likely to come if their child is doing something with them. So that's how it works. One week they do it in the hall with their child. We have sort of 15 minutes, just parents. Then the children come across and do a small activity and then the following week the parents get to go into the class.

So say, for example, if we've been looking at math games, they would do the activity in the hall with the parent and then actually sort of see it in action and also get an opportunity to speak with the staff within the classroom.

**SM:** So lots of the teachers listening to this, I'm sure will be Reception teachers. They'll be very familiar with the sort of maths that is handled in Early Years. So can you give us an example or flavour of something that you did with the parents and then the parents did with the children?

**LJ:** So, for example, we saved maths till the summer term because we decided that early maths, a lot of parents are quite confident with the counting, especially because we have a lot of parents who don't speak English. It's easily translatable, isn't it, when we're counting? But then we introduced **subitising** to them and maths games, and then we started to work looking at what maths would then look like in Year 1, when actually the concepts get a little bit harder.

So we were sort of building up their understanding of mathematical vocabulary and the sort of resources that we use, looking at tens frames, part-whole models, different resources that we would use. And then at the end of each session, the parents get to take away a **goody** bag as well. So, for example, they got a set of counters and **tens frames**, they've got Numicon, they've got a maths game. So that also helps with trying to get parents involved.

**SM:** Okay, two more quick questions for you, Laura. What sort of turnout have you been getting from parents?

**LJ:** To begin with, it was a bit hit and miss, and we were looking at around 30% of parents from our Reception cohort. But then by the end of the year, on average, we were getting about 50%, which actually, when we think about some things that we put on for parents, we might get two out of 120 parents. That was huge numbers for us.

**SM:** The funding, presumably, you've told us about loads of resources which you've sent home to parents. I presume that was part of the funding, but also the staffing. How did the staffing work with the funding?

**LJ:** Yes. So we have been able to fund release time for teachers so that our EYFS practitioners, because we have an **EYFS lead two EYFS teachers** and then support staff in the class, we've been able to fund them to come out of class to prepare for the workshops and deliver them, which also was part of the plan. So that actually we want parents to be able to foster these relationships with the teachers who are teaching their child so that hopefully we can break down the barriers that a lot of parents have with school.

**SM:** Great, that's really interesting. Thanks very much. I'm going to come to Roy at Clutterbuck now, also primary school teacher from a school in Sheffield, an individual recipient for something that's your baby personally, Roy, not a school's baby, so to speak. You've told us it's all about games. You told us it's Lightning Maths. And there's one particular game, I think that's already being used. Is that right? What's that called and what's that all about?

**RC:** That's right, yeah. The first game I developed was called **Lampogo 3**. And that was the sort of flagship game, really like Laura. I started developing the game just from out of my own classroom practice, really. I started developing the game even before I'd heard of SHINE. So, yeah, I spent some time developing that. And then it was later on that I've heard about SHINE while they were funding individuals with exciting new ideas and I thought it was perfect. So, yeah, that's when I applied.

**SM:** So tell us about the game. Does it involve physical resources, physical cards, or is it all electronic, online?

**RC:** So all my games are physical. Actually, I was trying to remember there is a mathematical word for this, maybe you know, but there's a triangle and there's a value on each side of the triangle. And then the children have digits. So I've made digit counters from one to nine. And they need to place the counters at the corner, the vertices of the triangle, and then the digits at each corner add up to make the value in the middle. And I think it's called an **arithmigon**.

**SM:** Yes, I've heard that before. Yeah.

**RC:** So really, I've just taken the concept of an **arithmigon** and I've made it into a game. So inside the box there's over 80 puzzle cards that will have visual **arithmigons** on and pupils flip over a card, have to put the counters on to solve the puzzle. And yeah, that's how the game works.

**SM:** And I've also read that a key aspect of the game is that children playing have to, at some stage explain why they've made various decisions. Is that right?

**RC:** That is right, yeah. One of the mechanisms, really, that I really wanted to engage and make maths more accessible was to take it away from the regular kind of worksheet format that maths is often taught in. And I want to make it fun. So, yeah, that's why we're using cards and we're using counters, so there's not any writing. They **don't have to use a pencil or a pen** because that's a barrier for a lot of pupils. So it's all sort of hands-on. And then obviously there's a lot of talking because they're not focusing on writing, they're talking more, talking with their partner, talking with the teacher who's supporting them.

And then once the pupils have put the counters on to solve the puzzle, they'll then well, first of all, they'll be able to see themselves if they've got the answer correct because there's a nice sort of self-checking mechanism. And then once they know they've got the answer correct, they can then explain

it to the adult who's running the session, or to their friends or to their parents at home. They can explain how they know that those digits add up to make the value and how they know they've solved the puzzle.

**SM:** I'm sure that will resonate with all the teachers listening to us because getting children to explain their mathematical thinking is such a key thing these days and always has been, but it's a great driver of mathematical understanding. So you've received funding as well. What has the funding specifically enabled you to do?

**RC:** So, yeah, the funding has been completely transformational. I think if I didn't have it, I would just still be in my class, just doing it with my own class in school, which obviously would be great, but with the funding, I was able to spend it on some resources and get the resources properly made and then send it to other schools.

So when I started, I was actually in London, and I was in a really good Maths Hub network with lots of other really inspirational motivated teachers. And I went to one of my hub meetings and I showed them all and had about 15 people sign up straight on the spot saying that we'd love to give this a go. So that was that's when I started off and now I've moved to Sheffield.

And so when I first started, I was still working full-time, so I was just doing this sort of in my holidays. But now, a couple of years on, I am actually working just part time and I'm able to use some of the funding as well to sort of pay myself some of the days I work. And then I do product development when I'm not at school.

And I also spend days going to do training workshops for other schools. So, yeah, I'm in Sheffield, so I've been working with some schools in Sheffield, but I've just been just last week, actually, just this week, being over to work the schools in Manchester, and I've got some school in Doncaster that I'm hoping to work with soon. So, yeah, that's what it's allowed me to do, to be able to spread it to other schools.

**SM:** Great. Well, thanks very much. Two really interesting projects there. Completely different, but really interesting. So I hope that's given you, the listener, a bit of a flavour and perhaps you might think about having a crack at applying yourself.

So, back to you, Eleanor. We're having this conversation in December. What is the application process, please, for schools and individuals?

**EH:** Okay, so if people are thinking about applying for a school-based grant that is done through the website, there's an enquiry form, and the best thing to do if you're a school and you want to apply for SHINE funding is to apply. You can read through the criteria on the website and you can submit an enquiry and then our programme manager will get back to you.

Now, for Let Teachers SHINE, it's a slightly different process. It's run as an open application round. We call it a competition and we have multiple winners. So the opportunity to be able to apply, it's also done online. So you can go to our website, you can find the application form, you can apply there and then it's open for applications through up until 16 January, at the end of that day, and then we would shortlist internally and then we'll take successful applicants through to an interview panel, which will fall in the very first week of March.

**SM:** Great, thanks very much. And the web address, correct me if I'm wrong, Eleanor, is [shinetrust.org.ok](http://shinetrust.org.ok)?

**EH:** That's correct.

**SM:** Great. Well, thanks very much indeed. Thank you, Laura. Thank you, Roy, for giving us your two examples. And thank you to you for listening at home. If you think you've got an idea that might get an award, why not give it a crack and make an application? This has been the NCETM podcast. We come up with one every few weeks, so if you've liked it, please subscribe to us so you get notified for the next one.

Roy's got his finger up. Roy, what would you like to say just as we are winding up?

**RC:** I just thought I should say, I do have a website, [lightningmaths.co.uk](http://lightningmaths.co.uk). And I also have a Twitter. I know there's lots of avid Twitter educators, so yeah, [@Lightning\\_Maths](https://twitter.com/Lightning_Maths), if people want to find out more.

**SM:** Okay, fine. Thank you very much. **We like adverts.** Laura, if there are schools in Bury and Manchester interested in what you're doing, you know, could they come and have a chat with you to find out how you work with parents to get a few tips themselves?

**LJ:** Yeah, of course. 100%. We are East Ward Primary School in Bury.

**SM:** Great. That's an advert for Laura, an advert for Roy and an advert for SHINE. Thanks very much, everybody, for listening. And for now, goodbye.