Seven Little Mistakes
Some Parents Make
Which Means
They Don't Help Their Children
As much as they could

Leading to more stress
less success

And Worst of All
Far Less Time to Play

Jeremy Shiers

The Purpose of This Report

My purpose in writing this report is to encourage you to spend time with your child helping them learn.

The good news is that you do not have to spend a great deal of time. Consistent, regular, short sessions are far more important than long ones.

Learning should be fun. Once it is perceived as dull or boring then any chance of learning is lost.

How long is short?

I have found that 5 or 10 minutes a day is enough, perhaps this is because this is the time it took me to go to school.

I'm not saying you can't do more but in my experience regular practice of less than 15 minutes is more than adequate.

Does it have to be every day?

No.

Does it have to be every school day?

Again no.

But once you start missing days it can get to be a habit and the regular learning isn't regular any more.

Humans have a tendency to forget. This tendency can be countered to some extent by regular review.

After all you probably remember

- Your name
- That you have to stop at a red light
- $1+1=2$

And you probably will never forget these, even if you do forget your partner's birthday.

Hermann Ebbinghaus was one of the first people to study learning, memory and forgetting. He published his most famous book, *On Memory*, in 1885. Ebbinghaus found most people could only remember 20% of what they had learnt after a month.

But then he was getting them to

memorise lists of made up nonsense words.

He also found for a fixed amount of learning time it was best to split the time into a number of sessions.

Surprise surprise

Regular sessions, Little and Often work best.

You may be wondering why I have offered you this report for free.

There seems to be a problem with the amount of maths that children are learning at school in this country.

Studies show that the UK is slipping down international league tables.

I have found that I was able to help my children using the method of regular sessions, little and often that I am describing here.

It seems to me that there are two reasons why parents don't do this.

1. They believe they can not do it. After all maths is different nowadays and teaching is the schools job.
2. They start but don't keep going

My guess is that you already know some maths, certainly addition, subtraction, multiplication and division. This is more than enough to start, especially as some children are leaving primary school without having learnt all their times tables.

So my mission is to encourage you to start.

If you can only do 5 minutes once a week, that is better than nothing.

And I am sure you already know enough to do this.

If you are a little rusty then you will learn too.

I have written an other report *Starting Arithmetic*, about 200 pages long, which explains how I have helped my children over the last 17 years. And some of the things I learnt on the way.

Although I believe you already know enough to help your children but I believe *Starting Arithmetic* will help you and certainly save you time.

At the end of this report there is more information about Starting Arithmetic and a link to the website where you can purchase a copy.

But for those who don't want to delay here is the link.

StartingArithmetic.com

Of couse Regular Sessions, Little and Often can be used when learning anything. But Arithmetic and mathematics seems a good place to start as the UK's performance is declining.

Development

It seems that we are born with an inbuilt desire to learn and explore.

Anyone who was watched a baby will have seen this.

Perhaps because it is part of your normal everyday life, most parents drastically underestimate the huge effect they have in their children's development.

Especially in the early years.

Recent research has found that your success in life is largely decided by the time you are 5.

Think about it for a minute, some of the hardest things your child will ever learn they learn with you

- Walking
- Talking
- Reading
- Writing
- Counting

These are things that almost everyone learns to do. Maybe this is why it is often overlooked how large these achievements are.

And

Not everyone does achieve them.

Fortunately this happens rarely but when it does it is truly shocking.

The website www.danisstory.org describes the story of Danni, who became known as '*The Girl In The Window*'.

Danielle Crockett was found in Florida 2005. She had been kept locked in a room for the first 7 years of her life, deprived of all human interaction.

When found Danielle weighed just 46 pounds. She was locked in a room surrounded by a pile of diapers about 4 foot high.

Danielle's mother was quoted as saying

> *Ahhm doin the best*
> *ahh kannn.*

Danielle could not speak and as far

as I know still can't. Her IQ has been rated as 50, whilst that of her mother is 77.

Karen Armstrong, the first psychologist to examine Danielle, found there was nothing physically wrong with her. Dani had been left alone so long she had just withdrawn into herself.

Karen Armstrong said this was the worst case of neglect she had ever seen.

Harry Humprey discovered in 1960s that if baby monkeys were given the choice between an artificial mother that dispensed food, and one with some sort of soft cover which the babies could cuddle, the babies choose the mother they could cuddle.

To quote Karen Armstrong again

> Primates need comfort even more than they need food.

Although these cases are rare, Danielle's is not the only case.

In Russia in 2009 a 5 year old girl was found who had spent her life locked in room with cats and dogs. No toilet, no heat. When found this girl could not speak but would bark and jump like a dog.

Sue Gerhardt describes in her book *Why Love Matters*, how it was found that the brains of some Romainian orphans who were abandoned in orphanages failed to develop properly. Literally there were parts of their brains missing.

Now these cases are extreme.

But I hope they are enough to convince you of the effect, no the huge effect, that you have in your child's development.

In his book *Outliers*, Malcolm Gladwell describes how children from better off families tend to do better than children from poorer families. This difference was attributed to the better off parents being more involved in their children's lives. It was not that they tutored their children, but just they took more of an active interest in how their children were progressing.

The parents in poorer families didn't intend to affect their children but they made two assumptions

1. Learning was something that happened in schools.
2. They couldn't or shouldn't help.

So there you have it, all you have to do is take an active interest in your child's learning. Or to put it even more simply take an active interest in your

child.

But what I am saying is that with just a small amount of time you can do even more.

They say you get what you expect.

Am I talking about *The Secret*?

No.

Psychologists and behavioural economists have long studied the effect of peoples' expectations on what they achieve.

Have you heard of the placebo effect? People given a pill with no drug in it tend to get better if they are told the pill will make them well.

Behavioural economists have found that people tend to get better if they buy an expensive medicine than if they buy a cheap one even if both medicines are identical?

Given the effect that you have on your child is it possible they could be influenced by your expectations.

Do you think maths is hard, or pointless?

Do you think your child will do well, or is just average?

Henry Ford said it years ago

If you think you can
Or you think you can't
You're probably right

Do you believe you can help you're child with maths?

I believe you can.

What's more its not hard, it doesn't take long and can even

SHOCK HORROR

be fun.

Time Limit

It is common in sales and marketing to have a call to action and a deadline.

> This weeks special offer
>
> While stocks last
>
> The first 100 lucky customers
>
> Take advantage of our special introductory offer

I'm not going to do that here. Though at some point in the future I may decide to change the price of 'Starting Arithmetic'.

> Why?

Simples.

There already is a much better time limit than anything I could dream up.

Your child is growing up.

There are about 2500 school days from the age of 5 to 18.

That may seem like a lot but once they're gone they're gone.

Everyday that you delay helping is a day when you could have helped, lost.

This is more relevant in a subject like maths which has a progression of knowledge. The things you learn later depend on understanding what came before.

It's not hard to help.

It only takes a few minutes a day

But you have to do it.

So what are you going to do?

Never Too Late

Maybe I left you a bit depressed after the last section.

Quick Quick Hurry Hurry

Time is running out.

But the simple truth is it's never too late.

This is self-evident to anyone who looks around them.

People who left school at 16 are gaining degrees later in life from distance learning organizations like the Open University.

It is said that it is much easier to learn a foreign language before the age of 12. But look at all the teach yourself courses in bookshops.

Pensioners are buying computers and teaching themselves about the internet.

There are pensioners making records. *The Zimmers* claim to be the band with the oldest members in the world. Their current lead singer was born in 1906 (or perhaps it's really 1913). Their first single was a cover of

My Generation

So if it's never too late and you can always go back and learn.

What's all the fuss about?

Firstly it's harder.

Secondly you've let some of your life go by, without being able to use the stuff you learnt later. So in some sense you've given other people a head start.

In the Dispatches program *Kids Don't Count* broadcast in February 2010 it was revealed that it is possible to enter teacher training college and then go on to teach maths at primary school with only a grade C at GCSE.

Surely it seems obvious that people who only have a tentative grip on a subject will not be able to teach it as well as people who understand it thoroughly. (Note this is not the same as saying everyone who is good at

maths will be good at teaching it).

The Dispatches program featured a school near Bristol where most of the year 6 were about 2 years behind where they are expected to be. The school bought in a specialist maths teacher, Richard Dunne. In less than a year Richard had communicated so well that the pupils caught up.

What Richard did wasn't exactly rocket science. He was enthusiastic and engaged the whole class. He started using physical objects (cups) and showed how writing in symbols $(1 + 2 = 3)$ related to moving the cups. Put 2 cups on a table that already has a cup and you end up with 3 cups.

Michel Thomas taught French, Spanish and Italian to people like Woody Allen. Despite charging $25000 or more for just a few days work he claimed never to have given a refund.

Why?

Because the way he taught worked.

Partly because of Michel's understanding of how languages work.

Partly because of the way Michel structured his lessons.

And most importantly because he worked with people individually and so was able to tailor his lesson by watching what his students understood and what was causing them difficulty.

I don't know whether Michel had ever heard of Ebbinghaus, but regular review was a key feature of Michel's teaching.

You will have the same advantages working with your child.

You can tailor teaching to their progress.

You have plenty of time (at least 1000 days) so you can go over stuff to make sure it's locked in.

If ice creams cost £1.50 each how much do 3 cost?

How much change would you get from £5?

If two ice creams cost £5 how much would 5 cost?

If you have 12 biscuits that you want to share equally between yourself and 3 friends how many would everyone get?

If interest rates are 5% and you have £100 in the building society how much extra will you have after one year? How much after 2 years?

That's basically it.

Imagination

Imagination is our greatest gift, it is the powerhouse of our creativity.

Everything that was ever written, created or invented first existed as an idea.

So every

book
play
recipe
song
film
advert
invention

first existed as an idea in someone's imagination.

It's no accident that John Lennon's greatest song is Imagine.

Einstein said

> *Imagination is more important than knowledge. For knowledge is limited to all we now know and understand, while imagination embraces the entire world, and all there ever will be to know and understand.*

When someone thinks about

what they want to do in life
where to go on holiday
what they want as a present

they have to imagine it.

If you want to understand how other people think or feel you have to imagine how you would react in a similar situation.

Children are naturally curious and have great imagination. Anyone who has ever watched children play will have seen this.

When people talk about using their imagination they are usually talking about visualising, making pictures in their minds.

But imagination can be used to create or recreate any sensation, sound, feeling, smell, taste.

Unfortunately imagination is undervalued in our culture and not enough emphasis is given to using and developing it. Like any skill or ability it can be improved with practice.

Moreover our ability to imagine seems to be killed or at least dampened as we learn to use words.

What has imagination got to do with learning maths?

A great deal actually.

Probably the single best tip you can give someone who is trying to solve a problem is look at some physical example.

If you haven't got any cups, ice creams, cakes or smarties to hand just visualise them. The bigger clearer and brighter the better.

In his book *Outliers* Malcolm Gladwell writes at some length about how culture and language factors affect and correlate with learning maths.

In English and other European languages the names for numbers are irregular whereas they are highly regular in Chinese and other Asian languages.

In Chinese the names of numbers are significantly shorter which means it is easier to hold a question in your short term memory.

I have a solution which completely circumvents the length and inconsistency of the names of numbers in European languages.

DON'T USE THE NAMES

DON'T EVER REPEAT A QUESTION, not even in your mind.

As you hear a question being asked, imagine it being written down in your mind.

My experience is that when people repeat a question, they will forget it or repeat it incorrectly.

But if you can see the question written down then you can solve it pretty much straightaway.

How To Learn

Learning starts of with listening and repeating.

Babies' first words are usually about the things around them.

Apart from 'No' and 'More'.

This is basically what Ebbinghaus got his subjects to do when they memorised lists of nonsense words.

We learn lists of colours, lists of foods, list of things we must not do and also lists of numbers.

A second type of learning is related to procedures or cause and effect.

If we do this then that happens.

Gradually through playing games like snakes and ladders children learn the names of numbers and counting on and counting backwards. The basis of addition and subtraction.

You can help by talking about numbers and playing games with numbers.

Later you can explain how we write in symbols such as

$$2+3=5$$

to mean that if you have 2 smarties and I give you 3 more then you have 5.

This will help form the link between physical objects and symbols.

You could explain a procedure for working out $2+3=5$ such as starting at 2 on a ruler and then stepping forward 3 numbers.

Similarly you can link $5-3=2$ with taking or giving away cups, smarties or pennies, or stepping back along a ruler.

Regular small steps, little and often are more useful than a long burst of activity once a month.

It is wildly unrealistic to expect people to be able to do something new perfectly the first time they try. And to be able to continue to do it without fail for ever more.

If you think about learning to walk

the process really starts as soon as the baby is born. By three months they will be moving arms and legs. They gradually get control over their body, starting sitting up and crawling. They start pulling themselves up, eventually stand up. Take a few steps and perhaps fall over.

It will take a few months before they begin to be able to walk a long way. But by 18 months to 2 years they will have definitely done it.

So this is a process that takes at least 6 months, 9 months or maybe more.

Think in terms of this sort of timescale for learning other things

- Times Tables
- Skateboarding
- Playing Piano

When a baby tries to sit and falls down, or tries to stand up and falls down that's not failure it's practice.

The key is to do the small steps over and over again and not to worry about success or failure on any particular occasion. But over time, a term, six months, a year. Be patient and improvement will come.

When a baby is starting to move around they do it every day. They don't say it's Sunday I'm not going to bother to move around today.

They will do a bit of pulling up and sitting up for a bit. Then go and try something else like scribbling on something or emptying out one of your cupboards. Then they will try something else like standing up or rolling over. It's something that happens a little bit all the time, every day.

Whatever you are learning anything this is the best approach.

If a child was only to try and learn to speak one day a week they are not going to progress nearly as quickly as if they try speaking, or listen to people speak every day.

In the same way when we get to school, when we start learning to write and read, do sums and tables, draw pictures. Doing some every day, or every other day, doing some regularly will be by far the best way of learning and making that skill part of your life.

It's what we do with

Walking

Talking

Riding a bicycle.

Quite why people expect to have a

piano lesson or a golf lesson once a week and not do anything in between and still get better confuses me.

It's surprising how little time you need, certainly at the beginning five minutes, ten minutes a day is ample.

If you were learning the piano and you were getting to be a world class pianist and about to go to college you would be practicing eight hours a day. I've known people who have done this and they do literally practice eight hours or more a day.

But to begin with that's not necessary at all.

And it would be counter-productive if it turns it into drudergy

Small amounts little and often.

People make mistakes. But people learn by making mistakes.

It can be frustrating if you are watching and helping.

What can help you be patient is understanding that people don't make progress in a steady upwards direction.

There is a tendency to

Make mistakes

Go backwards

Sudden bursts of improvement.

These are like little wiggles. It doesn't matter so long as the overall trend is up.

By being patient, and keep practicing improvement will come. Stick with it and in three months, six months or a year there will be a huge difference.

What you are really doing is:

1. Helping your child to learn a particular topic.
2. Giving your child confidence that they can learn.

You are showing them a method

Break things into small steps

Practice regularly

Be patient

Progress will come.

There is a sort of double think where you want to get better but you have to be patient and not worry about improvement, trust that improvement will come with practice and time.

Remember there are 2500 days in school so things don't have to be done in a rush.

On the other hand because there 2500 days things have to be reviewed

every now and then to prevent them being forgotten.

The way to solve problems, particularly maths problems is by thinking.

Guessing rarely works and never works reliably.

You can show your child methods that they should follow to work out problems. Most of 'Starting Arithmetic' is explaining various methods for solving problems. It sounds complicated but they're simple really.

Most humans have a tendency to guess, or just say the first thing that comes into their head when asked a question. This is if they don't freak out.

Key steps in learning are

1. Learning to actually listen to the question
2. Learning methods to solve problems
3. Learning to choose which method works for different types of problems
4. Actively thinking, using the right method to solve the problem

It's been my experience that people will

1. Whine or moan that the question is too difficult.
2. Then try guessing.
3. Finally when all other options are exhausted they might, given a sufficient nudge, actually try thinking.

And here I'm talking about grown-ups!

Curiosity Draws Us Forward Success Rewards

Humans are born curious, with an innate desire to explore the world around them.

Children don't need to be encouraged to learn they'll do that by themselves. But it is possible to discourage children from learning.

Either by ignoring them and not interacting with them.

Or by putting blocks in their way:

> *Sit still*
>
> *Be quiet*
>
> *Go to your room*

It is also possible to undermine children's confidence. In fact, sadly, it's all to easy.

> *You're not very good at writing.*
>
> *No one in this family has been good at maths.*
>
> *You'll never be as clever as your brother.*

It can be disheartening to hear things like

> *I always get things wrong*
> *So there's no point in me giving an answer*
> *As whatever I say will be wrong*

If you can provide an environment where children feel it is safe to try, even if they make mistakes, you will find that once they experience some success that becomes its own reward.

Once children begin to truly believe that they can solve problems they will want to do more.

People are sometimes put off subjects like maths or science because they have been made to feel stupid by their teacher. Or maybe they don't understand and don't wish to keep asking questions for fear of appearing stupid in front of the class.

Surely we should shift the focus from

teaching to learning.

So for each individual we should ask what do we have to do, what explanation do we have to provide so that this individual understands the point we are trying to make. And until and unless the individual does understand then it is the person providing the explanation who has ”failed”.

It doesn’t seem that radical an idea. We expect every body to learn to walk, we expect everybody to be able to speak and read and write.

Maths, certainly at school level, isn’t that different. It is stuff that every person should be able to do if it is explained to them in a way that that particular person can understand.

Other Thoughts

I have talked mainly about maths in this report. This might lead you believe that that is all I think about, or that I think maths is more important than anything else.

This is definitely not the case.

Look at it this way. If you can get your maths learning done in 15 minutes a day or less, then you've got the rest of the day for other things.

When people are about to die it is rare for them to say things such as

> *I wish I'd spent more time in the office*

Or even

> *I wished I spent more time on maths.*

What is common is for people to say something like

> *I wish I had more time to spend with the people I love.*

Bernard Buchard says that we can measure the quality of our lives by asking these three questions

> *Did I live?*
> *Did I love?*
> *Did I matter?*

Most of our most vivid experiences come through our interactions with other people.

For this reason it is more important to develop what is called *Emotional Intelligence* rather than IQ.

Many of better-paid careers involve being able to relate to, motivate and inspire other people.

- Actor
- Writer
- Advocate
- Manager
- Copywriter

In fact it is probably shorter to make a list of jobs that do not involve any influencing or persuading others.

I have yet to think of one.

Despite this there is still

Did I matter?

Humans have a need to understand and explain our world, and inevitably this involves science and mathematics.

There are many careers which involve some maths and pay some what better than other careers simply because there are less people about who understand maths.

- Accountants
- Scientists
- Engineers

Now I am not saying that your child should follow one of these careers.

I am definitely not advocating that you make the choice for your child.

All I am saying is that by helping them gain the knowledge you are giving them the option.

If they choose not to take the option that is their choice. But at least they had the chance to choose.

But What Are the Mistakes?

1 Drastically underestimating the effect you have.

2 Thinking that learning is something that just happens in school.

3 Thinking that you are not able to help your child learn.

4 Not realising learning can be fun.

5 Using long infrequent sessions instead of Little and Often

6 Starting but not continuing.

7 Not realising that learning goes in fits and starts and sometimes we go backwards.

Look for progress over a term or a year rather than in days or weeks.

By the Way, Buy the Report

I am in interested in how people learn and think.

I am also interested in maths and am concerned that so many children are leaving school without a proper understanding of maths.

As you have read this far you must share this interest too.

At school level, especially primary school, maths just isn't that hard and it is something like walking, talking and writing that everyone should be able to do.

As the UK is slipping down international league tables of school children's maths ablity either

1. UK schools have begun teaching in a less effective way
2. Foreign schools have found a more effective way of teaching.

In any event if other countries are doing better we could and should be too.

In this report I have outlined methods that I have personally used with my children and found that it helped them significantly.

I have written another report, *Starting Arithmetic*, which explains in great detail in about 200 pages how I went about this.

Starting Arithmetic is not aimed at SATs GCSEs or any other exam.

The aim of Starting Arithmetic is to show you how you can help give your children such familiarity of maths and arithmetic that it is second nature.

Currently the pdf version of *Starting Arithmetic* is priced at £15 + VAT.

Or you can purchase the Times Tables chapters from *Starting Arithmetic* for just £3 + VAT.

Try for 30 days and if it doesn't work for you I will give you a 100% no quibble refund.

With nothing to lose why delay click below right now.

StartingArithmetic.com

Who is Jeremy Shiers

I studied for a BSc in Physics and Chemistry and then a PhD in Experimental Particle Physics, before a career in computing. There was usually some element of maths involved. Later I studied Mathematics with the Open University for a BSc.

Whilst learning about science I noticed the many many occassions when scientists did not change their opinions when new evidence was discovered that showed these opinions were wrong. In fact the most common reaction was people defended their positions to the death. In addition bright intelligent people regularly proposed theories that made no sense.

This lead to Max Planck to say science progresses one funeral at a time.

When studying I noticed some days I could learn easily at other times it was a real struggle. Often when I had a problem learning it turned out the block was in my own thinking.

As a post graduate student I helped in tutorials for undergraduates. And have been teaching or training since.

Often I saw similar effects in people I was training. Some times they understood easily, other times there were blocks.

These observations lead to being interested in how we learn, what can help, what can hinder. So I started reading about NLP and psychology.

Although most of my career has involved programming science and maths, I have also worked in sales when I ran a business selling computers. Managing staff and working with customers enhanced my interested in NLP and psychology.

I have helped my four children with learning and homework, including maths. This focused my interest in NLP on learning and lead to me developing the ideas described in *Starting Arithmetic*.

In case you wonder, ridefame ltd is the company that I have used since 1984 to supply services.

Contact Or Follow Jeremy Shiers

Email: Jeremy@JeremyShiers.com

Twitter: twitter.com/JeremyShiers

My Blogs

jeremyshiers.com/blog	Where I write about anything that interests me. Usually, but not always, to do with science and maths. Often about how science and maths is useful and relavent to peoples' everyday lives. It can be simpler than you expect and fun too.
sevenlittlemistakes.com/blog	Where I write about how parents can help their children learn.
startingarithmetic.com/blog	Where I write about how parents can help their children can learn maths at primary school level.

Parents want to help their children learn and develop.

Curiously most parents are unware of the huge amount their children do learn from them. Your children learn to talk by copying and interacting with you.

Sadly some children never learn to talk - just because their parents ignore them. These extreme cases are rare but do illustrate the huge influence parents have.

Many parents are unaware of how large an affect they have on their children.

It's a huge amount.

If your children can talk, read and write they will have learned from you.

The good news is that with just a small amount of regular attention you can have even more benefical effect. And by regular small amounts I mean about 5 to 10 minutes a day, 3 to 5 days a week.

What will you be doing? Helping your children learn to read, write and do maths. And do it better if they can already do these.

This report, Seven Little Mistakes, will explain how and why.

Visit

SevenLittleMistakes.com/blog

for tips on helping your children to learn.

StartingArithmetic.com/blog

for ideas on learning primary maths.

Jeremy Shiers is the father of four children. Jeremy has

- a BSc in Physics & Chemistry
- a PhD in Particle Physics and
- a BSc in Mathematics

He has always had an interest in how people learn and communicate.

Jeremy is the author of

Starting Arithmetic

A parents guide to help their children learn maths from preschool through to the end of primary school.

Value: priceless Cost: £0.00

SevenLittleMistakes.com

Jeremy@SevenLittleMistakes.com