

“Name the greatest of all the inventors? Accident!” Mark Twain

Most people hear a somewhat embellished version of the story surrounding Penicillin’s discovery, but it usually follows along these lines: After leaving a number of research cultures to one side for a little longer than intended, Alexander Fleming found some of them had been killed – by mould! Realising that something remarkable was afoot, Fleming began investigating – and the age of modern antibiotics began...

This tale – which is often told much taller and more colourfully – demonstrates an easily overlooked element of creativity... The usefulness of mistakes, accidents and wrong guesses! With that in mind, here are some tips to help you get to grips with the concept that led to inventions and discoveries ranging from Corn Flakes, inkjet printers and Post-it Notes to Coca-Cola, chewing gum and safety glass.

Don’t Panic! If Corporal Jones and The Hitchhiker’s Guide to the Galaxy both said it, it can’t be bad advice! But many of the anxieties people experience in the throes of error arise from what’s pompously been described as a ‘Deviation from Intention’. In other words, when things don’t turn out as planned, people get fed up, stressed or panicked. That’s natural, but it’s not particularly helpful.

As you probably know, the human brain is far less creative when stressed. And although a ‘Deviation from Intention’ might seem like a bad thing, we need to remember that most mistakes – no matter how trying – intrinsically hold the seed of creativity at their centre. That’s because creativity is about seeing things from different perspectives – and mistakes force you to see things from different perspectives!

Become more curious: From the first inkling that something’s wrong, many people’s attention is distracted by frustration, planning apologies, finding scapegoats or raising bail money! But many creative people channel their energy into looking at a mistake with acceptance, and being curious as to its value... Take a look at our Info Sheet (da Vinci) to find out more about curiosity and, with a curious mindset...

Resolve to examine mistakes: We’ll never know how long it would have taken scientists to look more closely at Penicillin if Fleming hadn’t had the wit to examine his serendipitous mould... But we do know that taking a look at mistakes – if nothing else – teaches us about avoiding similar mistakes in the future. So there is almost always something valuable to be found in a mistake – but there’s more to it than that.

“We began using video to communicate messages last year. We’ve seen a 51% year on year increase in goods distribution & a 76% increase in product donations.”

Robin Boles, CEO, In Kind Direct



**MAKE
MISTAKES
MATTER**

Three Questions can change the way you feel and think about errors if you ask them often and explore the answers:

1) How can this mistake be useful to me?

You must have had it happen - something goes wrong but then turns out to work in your favour... Well, most people give it very little thought. However, sincerely asking the question “How can this mistake be useful to me?” vastly increases the chances that it will become useful.

One example of this comes from Deej who, in his teens, misremembered how papier-mâché was made. Don't ask how he could misremember such a thing, it's beyond our ken! Suffice to say, he happily set about making a small prop by tearing newspaper into shreds, and dragging each strip through a bowl of Plaster of Paris! Not wallpaper paste. Not glue. Plaster of Paris... The nature of the error became clear after he took a long phone call in the middle of the job and came back to find the bowl setting fast... And the project looking and feeling like a rock!

After understanding the mistake – and being roundly mocked by Neil – Deej realised that this error actually makes for a very fast way to create large, sturdy, freestanding props. Plaster of Paris sets quicker than glue and paste, is easier to paint, and dries looking like a stone-textured surface. To this day the idea serves, so far helping to make a log cabin, a parody of the ‘Facehugger eggs’ from ‘Alien’, a fake plaster cast for an arm, a gravestone and a host of other bits in stage and video projects.

2) If it doesn't seem to help you, how could it be useful to someone else?

It may well be that your mistake is of more use to someone else than it is to you. Don't be afraid to broaden your thinking and consider what others might make of the error. The best-selling novelty ‘Silly Putty’ is a failed invention that falls into this category. It came about in 1943 when American scientists were attempting to make a silicone-based substitute for rubber to help the war effort...

The bouncing, snapping, stretching, picture-copying goo absolutely didn't work for that purpose and was largely dismissed – even by its inventors. It has no practical value at all – or rather it didn't, until six years later when it began being sold as a toy! In much the same way, you might find that a cook's disastrous attempt at pastry could make a child's modelling toy for an afternoon; a misprinted pack of cards can help a magician no end; even an embarrassing story about a mistake might, in itself, be grist to the mill in the mind of a writer.

3) What would MAKE it useful to somebody?

There are times at which neither of the above questions pays off... In which case this is the catch all. At the very least, learning how to avoid that mistake in future makes it useful! Beyond that, though, you might discover that the creative techniques ‘Factor Nudging’ and ‘What if...’ throw up something valuable. Check them out here: www.dmiproductions.co.uk/info

What if all this doesn't help? Well, what if it doesn't?! The mistake happened anyway; you've not lost much by looking at it with creative eyes! This is especially true when you keep applying these principles and asking the questions until they're habitual.

Wrong Guesses: Ever sat watching T.V. and found yourself guessing how a programme's going to end? Sometimes you'll deduce that the butler did it long before Morse works it out... But at other times you'll be completely wrong – and that's more useful! Why? Well, again, it means that you're seeing things differently. Without realizing they do it, a number of comedians happily take a wrong guess at the direction of another comic's routine and come up with a totally different flight of fancy! Some writers get inspiration from guessing what will happen to a particular character in a book or play, and are positively thrilled to find they have a new idea when nothing of the kind happens!

One recent example of this occurred recently when Stu Turner saw a comedy magician pick up a clear bottle of beer and chat about it during a show. Stu idly presumed that the magician would soon show the bottle in his hands was no longer beer: it would have transformed, unnoticed, into a bottle full of water, with a completely different label... But the magician did nothing of the kind: he simply made one joke and put the bottle down again - leaving Stu with a completely original idea! And you'd be amazed how often this sort of productive 'wrong guessing' happens.

What's Good for the Goose: Everything that is true for your own accidents, mistakes and guesses also applies to the accidents, mistakes and guesses of others. Keep your eyes peeled for errors and oddities around you and continually look for the intrinsic ideas that most people pass over so quickly.

To round off, here are 38 inventions or discoveries that came about through these principles – mixed with the serendipity of their being noticed. And if you need convincing as to the value of examining your mistakes, think what the financial value is to any one of these things – never mind all of them!

Anesthesia	Microwave Ovens	Silly Putty
Aspirin	Nachos	Slinky
Bricks	Pacemakers	'Smart Dust'
Chocolate Chip Cookies	Plastic!	Soap that floats
Coca-Cola	Popsicles	Tea
Crisps	Post-It Notes	Teabags
Dynamite	Play-Doh	Teflon
Frisbee	Radioactivity	Valium
Fudge	Ring Doughnuts	Viagra
Glass	Saccharin	Velcro
Ice Cream Cones	Sandwiches	Vulcanised Rubber
Inkjet Printers	Superglue	X-rays
Maple Syrup	Scotchgard	