## What you need to know Minecraft? by Ms. Kincaid

inecraft is an electronic game that allows players to build a fantasy world out of 3-D blocks. Swedish founder Markus Persson began developing the game in 2009 and officially released it in 2011. Minecraft is geared toward a wide audience. However, elementary school children through those in their mid-teens particularly enjoy playing it. By 2016 Minecraft was the second highest seller in video game history, behind Tetris. (Tetris allows players to rotate falling blocks strategically to clear levels.)

Persson first developed Minecraft as a computer game. Since then, however, it has been adapted for mobile devices, Xbox, and PlayStation. In Minecraft, players create their own game rather than follow the game plan of the developer. The game has few instructions or rules. To make up for the lack of guidance, players have set up online forums to discuss the game. Some also have made YouTube videos with tips on how to play. These actions have helped to spread the game's popularity.

Minecraft is a creative game that focuses on building. Everything is made from blocks and looks cartoonlike. The blocks are made of various materials—such as stone, wood, dirt, or ore—that the players mine or collect after they detonate explosives. The players can play by themselves or join with others in building a communal world. They build a world from scratch, including buildings, clouds, and other parts of the natural environment. They can choose different modes in which to play, such as creative or survival. In creative mode, the players have unlimited resources to use, can go where they want, and cannot be injured. In contrast, in survival mode, the players start with nothing. They need to collect resources and make tools. In addition, they can weaken or die from such misfortunes as starvation, accidents, or attacks. The players can also increase or decrease the level of difficulty based on their abilities.

Although Minecraft players create their own world, they may come into contact with game-generated roaming characters. These include villagers as well as farm animals such as pigs and cows. Unfriendly characters that players may encounter include zombies, skeletons, witches, and spiders. The players can fight and kill these monsters. However, all conflicts can be avoided by adjusting the settings on the game. The game does not contain graphic violence.

While Minecraft was on its way to becoming successful, Persson founded Mojang, a software company based in Stockholm, Sweden. In 2014 Microsoft acquired Mojang for \$2.5 billion. Two years later Microsoft obtained the educational branch of Minecraft. Minecraft: Education Edition is designed to enhance the school curriculum as a supplement to class lessons. It includes lesson plans for teachers in multiple subjects, including coding, history, geography, and math. Examples of tasks include building an Egyptian pyramid, solving math puzzles, and devising

a plan to colonize Mars. These activities are intended to encourage creativity, problem-solving skills, and teamwork. Multiple schools around the world—including in the United States, Australia, France, Germany, and the United Kingdom—have incorporated these lessons into the curriculum.

In 2010 Mojang began an annual Minecraft convention. In 2017 executives turned it into an interactive livestream event.

#### Minecraft Game Modes Explained

Minecraft has two distinct modes. Survival and

Survival Mode is the traditional game. You start off in a randomly generated world and have to collect the supplies required to survive. These supplies are all crafted by you, the player, by setting out and exploring all the world has to offer. As you progress through cave systems, dungeons, and vast over-worlds, the sense of true accomplishment kicks in when you take a step back, and look at what you've created.

Creative Mode allows you a world of infinite possibility. The world that spawns before you can be infinitely customized using the various world creation options. Those options range from customizing how massive the mountains can be, how vast the oceans are. You can even customize if there are any oceans at all. The world can be made completely flat as well, allowing you





a blank, vast, open canvas for your creations. Or spawn a world with a top layer made entirely of TNT, and watch it explode!

#### Limitless

If you didn't understand Minecraft before, you might be able to understand it now. The appeal of these digital Legos is vast and truly infinite. It can inspire any gender and any age group. Minecraft's language is unlimited and universal. Raw creativity knows no bounds, particularly in a digital universe where the only limit of your creations is yourself. The only limitation of Minecraft is time. It is, otherwise, limitless, and there are some great shortcuts, cheats, and walkthroughs that make it even better!

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# **How to Play Minecraft (Beginner's Guide)**

inecraft is a virtual open world video game where players can dig, mine, build, craft, and enchant things. The game is typically described as a "sandbox game" because players can create their own worlds and experiences where the possibilities are truly limitless.

Unlike normal video games, Minecraft allows you to be in control of the game, and it even has options allowing players to act as moderators and build their own coding/modding directly into the game!

#### Getting started

Getting started with Minecraft is super easy. First, you need to purchase and install the game. After installation is complete, simply start the game by running the launcher you downloaded from the Minecraft homepage, which also gives you the option to play from your browser. Now it's time to log in, navigate the main menu, and select your game type. See our guide for beginners below.

#### Logging in and the main menu

The launcher opens the News screen, which displays game updates and links. Enter your username and password in the lower right corner and click Log In to continue to the main menu.

This list describes what you can do after you click the buttons on the main menu: SinglePlayer: Start or continue a basic game. The remaining portion of this article covers the options for starting a game in SinglePlayer mode.

#### MultiPlayer: Join other players online.

Languages: Change the language of the text in Minecraft. Use the tiny button, just left of the Options button, showing a speech bubble containing a globe.

Options: Manage game options such as sound, graphics, mouse controls, difficulty levels, and general settings.

Quit Game: Close the window, unless you're in In-Browser mode.

#### Starting your first game in SinglePlayer mode

To start your first game in SinglePlayer mode, follow these steps:

Click the SinglePlayer button to view a list of all worlds.

If you're just starting out in Minecraft, this list should be empty.

Click the Create New World button to start a new game.

The Create New World page appears.

In the World Name text box, type whatever name you want and click the Create New World button at the bottom of the screen.

To turn on cheats, click the More World Options button, and then click the Allow Cheats button to turn cheats on or off.

Turning on game cheats increases or decreases the level of difficulty as you play and switches between Creative mode and Adventure mode. Cheats give you more control over the world when you're just getting started.

When you finish creating your world, the game automatically starts by generating the world and placing your avatar (character) in it.

#### Selecting the right game mode in Minecraft

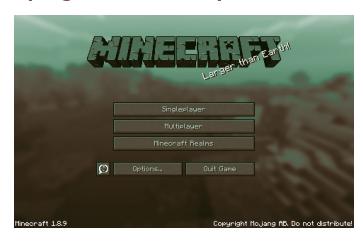
Minecraft offers several different game modes that allow you to experience the open world in a unique way. The following types of Minecraft game modes are

—Survival — after randomly being spawned in a new world, players have to try to survive by gathering material, building shelter, gaining experience, and fighting off hostile mobs.

—Creative — a game mode where players have immediate access to almost all blocks and items, are invulnerable and immune to death, and have the ability to fly. The purpose of this game mode is to create/design unique worlds.

 $-\!\!$  Adventure  $-\!\!$  players interact with objects (levers, buttons) and mobs to complete an adventure.

—Spectator — invisible to everything and cannot interact with blocks, entities, or your inventory. This mode is typically used to observe other players' created worlds.



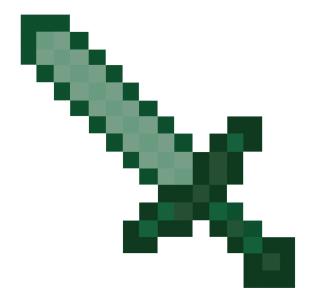
—Hardcore — similar to survival mode, Hardcore is set to the "hard" difficulty level permanently and players cannot respawn; once you die, the map is deleted (or you permanently become a spectator).

#### Your first day in Minecraft

When selecting SinglePlayer and Survival mode in Minecraft, your first day can be very exciting but also very stressful. You are immediately thrown into a world with little resources and have to prepare yourself to ensure you survive your first night, when hostile mobs are more likely to attack you.

Typically, your first day in Minecraft involves things like collecting resources, punching woods, killing animals, building or finding shelter, gathering food, etc.

Now that you know how to play Minecraft, enjoy building and exploring the limitless virtual worlds available to you!



## 10 Reasons Why Minecraft Is Beneficial for Your Kids

hen it comes to children and screen time, many parents take a cautionary approach. After all, many there are many digital outlets that vie for kids' attention, including TVs, tablets, computers, and smartphones that they can access at home or in school. And of course, parents also have to worry about lifestyle balance when it comes to sedentary and active recreation—the Centers for Disease Control and Prevention warns that over a third of children in the U.S. are considered either "overweight or obese."

At the same time, children must become fluent in current technologies in order to function in an increasingly digital world. Parents can help direct their children's attention to positive and healthy online communities, such as the world of Minecraft, an open-world building-block game for PC and console. Researchers at Radboud University believe that certain video games provide significant benefits to children, helping them regulate emotions, build strong social ties, and improve other cognitive abilities. The following list explores why Minecraft can be a valuable addition to your children's playtime.

#### 1. Easy Access

Both children and adults are easily captivated by the world of Minecraft. It's like discovering a limitless container of Lego blocks. The open sandbox format of this game makes absolutely anything possible. Avatars can collect resources by punching trees and digging up dirt. Eventually, these resources can be used in formulas to create other tools. Tools can start simple—hammers, axes, and shovels, but players gain enough resources, they can build complex tools—circuits, trains, and even houses. MinecraftEdu, an academic organization comprised of educators and programmers, recommends the game to teachers because it is "easily adaptable to curriculum" with "sandbox play [that] allows for ANY kind of experience."

#### 2. Inspiring Confident Exploration

Contrary to other video games that have strict rules and linear event progressions, Minecraft is an open environment that doesn't come built-in with structured quests. This means that youngsters can roam through this world and explore without an urgent set of tasks. However, they are still challenged by loose survival requirements, such as feeding their avatars, building shelter, or warding off enemies (giant spiders or green "Creepers"). Children are free to make mistake and succeed in the world of Minecraft. Wired notes that video games have the power to help players "overcome the fear of failure IRL" (In Real Life).

#### 3. Increased Creativity

There's no denying that Minecraft provides children with unprecedented opportunities for creativity. Some will explore extensive cave systems underground while other players might build lavish houses. Or who knows? Perhaps your child will reveal their architectural genius and create astonishing block cities and structures



inspired by real or fictional locations.

#### 4. Teamwork

Your children can play for long hours on solo missions. But families can also set up personal servers, so that other friends and family members can join in on the fun. Parents can also download custom Minecraft maps, such as multiplayer adventures. Psychologists have been researching video games as a way to build social skills, since children get to engage with one another to overcome obstacles and achieve success. In an American Psychological Association (APA) article, Dr. Isabela Granic describes studies that reveal "People who play video games... that encourage cooperation are more likely to be helpful to others while gaming than those who play the same games competitively."

#### 5. Problem Solving

Children must discover new resources and experiment with different recipe combinations to create tools in Minecraft. They must figure out how to build a shelter before night falls and feed their avatar. Research conducted by S.R.I. International reveals that video game play might be responsible in measurable problemsolving and memory improvements.

#### 6. Parents Can Play Too

Due to the game's extremely accessible entry point, scale-able levels of complexity, and group-play features, parents can also get in on the Minecraft action. Your building and survival experiences in Minecraft can be a great bonding exercise for the entire family.

#### 7. It Teaches Resource Management

Once children become thoroughly engrossed in Minecraft, they begin to start calculating the costs of their resources. For example, wood can be acquired by hand, but it's faster to use an axe. However, all of these tools will eventually wear out, necessitating even more resources. Your child will soon be weighing the economics of labor and resources as they seek to craft the thousands of recipes used in this game.

#### 8. Geometry Skills

There's no doubt that your children will get to exercise their spatial awareness and geometry skills while building structures with these blocks. Children will quickly learn what's possible with the six faces of a cube, and how to stack blocks in a way that is structurally sound.

#### 9. Community Engagement

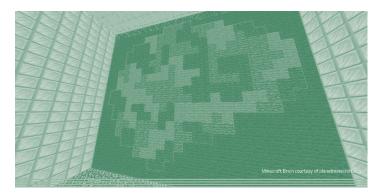
One of the coolest things about Minecraft is that other players are constantly sharing their custom-made modifications, quest maps, impressive artwork, and wiki entries. This culture encourages young people to explore their own ideas and contribute too. Depending on your child's age, you might want to explore special public servers, forums, and wiki guides together and see how other players customize their games.

#### 10. Age-Appropriate Content

Finally, Minecraft can be played by children of many ages. It has been rated for people ages seven and up by the Pan European Game Information (PEGI) and ages four and up for the iOS version. Yes, there is some use of weapons against enemies in the game; however the interactions are not graphic at all. And parents can always set the game to "Peaceful" mode, so that children don't encounter monsters at all.

So what are you waiting for? Pick up Minecraft for PC or console to start exploring some of the advantages video games have in store for your children!

# Does Minecraft Make You Smarter: Is it Good for Your Brain / IQ?



ccording to research conducted in 2018, most UK kids will spend an average of four hours a day looking at screens. If that's to be believed, and there's no reason why it shouldn't be, it's crucial to make informed and conscious choices about the type of media our kids consume.

With video games making up a large proportion of this screen time, it's no wonder so many parents want to know more about the popular Minecraft game. A particular concern could be whether Minecraft has the capacity to make kids smarter, be an IQ booster, and ultimately good for their brain.

Here's our take on things...

Does Minecraft make you smarter?

As far as non-violent, educational games go, Minecraft is arguably one of the best. It can teach kids the fundamentals of programming skills, teamwork, problem-solving, project management, and offers a fantastic environment to foster creativity and "out of the box" thinking.

Because of this, there have been various studies and opinion pieces that point towards the idea that Minecraft can make you smarter.

For example, a study in 2017 conducted at Glasgow University linked playing video games and Minecraft to future university success. Their research found that people who played the game were able to show increased communication, adaptability and resourcefulness scales, compared to the control group – all skills that are seen as being key for graduate success.

Most of these benefits are owing to how the game is structured. With no real storyline and limited direction on how to play, children are mostly free to decide how they want to interact with the game.

Is Minecraft good for your brain?

We believe Minecraft can help your brain. One of the researchers behind the Glasgow University study also believes this, and made the following statement to the Daily Mail newspaper:

For children particularly, it could be said that the activities in Minecraft can make them smarter and even get them ahead at school.

For example, when starting a new game on Minecraft, players will be presented with a randomized map, made up entirely of blocks. It's a bit like a LEGO project, as these blocks can be removed, rearranged, and used to build something entirely unique.

When faced with the blank canvas of a new world, children can choose to build their dream house, a castle, a hidden underground sanctuary, a town, a farm, or anything else their hearts' desire.

As children continue to explore, they'll find that they can produce devices for making mundane tasks more manageable. With the addition of Redstone blocks, children can build completely customizable machines, and in doing so, learn the fundamentals of coding – which is an essential skill for future careers in the UK.

With the option of multiplayer, children can also play with friends on a shared map. Doing this promotes clear communication and teamwork as players divvy up building spaces and communal tasks. Although children on their own can produce some fairly impressive projects, working together can result in genuinely breathtaking pieces.

Does Minecraft increase IQ?

Whilst we can find no studies that definitely state a kids  $\mathbb Q$  can be increased by playing Minecraft, we certainly agree with the educational benefits this game can offer.

All in all, there are plenty of possible IQ benefits to playing Minecraft, but here are some of the best that could be good for your brain.

#### 1. Encouraging creativity and project planning

Perhaps the most striking benefit offered by Minecraft is its endless scope for creativity. It provides many of the same building opportunities as LEGO, only with an average of 921.6 quadrillion blocks per world. With that much material, it's possible to build just about anything that your kid could imagine.

If in any doubt, just take a look at Westeroscraft. Arguably one of the most expansive and breathtaking Minecraft projects around today, this community-based project is dedicated to recreating the continent of Westeros, from George R. R. Martin's A Song of Ice and Fire series.

Pretty much any screenshot from this project is mind-blowing, especially when you consider the time, planning, and sheer dedication it would have taken to get this far in the project.

Although it's unlikely that a younger child will churn out something of this scope, it does go to show just how much you can create with the materials available in Minecraft. The sky truly is the limit when it comes to this game.

#### 2. Reinforcing problem-solving skills

Although most games will promote problem-solving skills to an extent, Minecraft is unique in that it allows players to set their own goals and offers an enormous amount of freedom in how they meet challenges.

As an example, the one challenge universally faced by players in standard Survival mode is finding shelter and a reliable source of food. Although it's relatively safe to wander about the world in the daytime, at night, the world is populated with

Without shelter, players will either need to run or fight until sunrise, when most of the monsters will erupt into blocky flames. Doing this without decent equipment is a challenge and can be pretty exhausting, so unless you're committed, it's usually not worth the struggle.

However, when it comes to building a shelter, there are countless options, depending on the player's goal and play style. They could carve out a small burrow or construct a simple dirt hut and wait it out until daybreak. They might continue digging down and spend the night mining.

### FunTech's Minecraft coding camps

We have been at the front of Minecraft education for years. Our summer camps in London and the South East of England have seen thousands of kids pass through

At our camps your child can receive the Minecraft tuition they need, but also create long-lasting friendships and team with the other children in the class.

- Our Minecraft tutors work each summer, with our tuition classes being:
- Average of 8 to 1 student to Minecraft tutor ratio
- Ofsted registered
- Accept childcare vouchers
- Running from 9am to 5pm
- Structured learning
- Over 24 years of experience
- All venues within reach of easy transport links

Alternatively, they could commit to building a home, which could range from a simple wooden hut to an elaborate fortress.

In addition to this, players also need a reliable source of food. An empty stomach impacts the player's health and can lead to the character dying if left for long enough. Although players could always hunt for food, it's also possible to build crop and livestock farms.

In our experience, part of what makes Minecraft so good for reinforcing problem-solving skills is how simple the game is. A lot of the tasks needed to survive long-term can become monotonous with time.

However, they can also be automated in some way, and this encourages children to think outside the box since there are no in-game tutorials for fixing these problems. This means that have to use their brain more than any other video game we've ever encountered.

With the addition of Redstone, which allows players to code their own devices, the options are virtually endless. With this versatile block, players can create automated farms; quicker transportation; elevators; doors that close automatically; booby traps; and hidden entrances.

We've even seen purpose-built mini-dungeons, designed to spawn specific enemies for the items they drop when defeated.

#### 3. Basic programming and logic skills

If you're looking to introduce your children to programming, Minecraft could be an excellent starting point... kids grow to love Minecraft very quickly due to the simplistic nature it initially offers.

Although it won't teach your kid a programming language, using Redstone blocks will introduce them to the fundamental logic of coding. This in turn makes Minecraft good for their brain and could be said to make them smarter...

Redstone introduces IF, THEN, ELSE, and END functions to players, which can be used to build mechanisms that range from relatively simple to ridiculously complex.

Kids can learn to progress from automated doors, booby traps, and elevators, to fully functioning mini games. These enormous, self-contained structures in the sky allowed them to play a variety of games, which included capture the flag, hide-and-seek, and tag.

Many of the video game designers of today got started with Minecraft. It's a great introduction to the game design – we mention this in our short guide on how to get your kid started with making their own

#### 4. Teamwork and communication

As kids get older, they can progress to playing Minecraft on shared servers with their friends. Playing together on Minecraft can teach them to work effectively as part of a team. It also demonstrates very clearly that by working together, kids can do so much more as a group than they could ever hope to achieve alone.



For example, they might decide to create a new map together. As part of this, they might vote to tackle the shelter and food problem by building a massive farm together. Kids can divide up the necessary tasks between themselves; one in charge of foraging, another in charge of building the basic structures they need, and a third in charge of mining.

Aside from teaching kids to respect each other's projects and things, it can also teach them to solve problems for the people around them.

#### 5. Reinforces social skills in Autistic children

Aside from promoting teamwork and clear communication, many parents are reporting that Minecraft is hugely beneficial for children on the autistic spectrum. By giving them an environment that strips away challenging social factors (background noise, eye contact, social queues, etc.), it allows autistic children to more easily make friends and improve fundamental social skills.

In A Boy Made of Blocks, Keith Stuart tells of how he was able to better connect with his autistic son through Minecraft. He had struggled at first, as his son was socially awkward, but by playing together, it gave him an avenue to learn about his son's passions and interests.

#### 6. Resource management

When playing in Survival mode, players will quickly need to learn resource management. Finding and gathering the right resources for specific projects takes time, with the most valuable blocks being the rarest to find.

Diamonds, for example, take a specific mining tool and often require players to dig as far down as the level will allow them to go. Even then, it can take half an hour or more to locate a diamond vein, which will typically only provide eight blocks.

Players will quickly learn to manage the resources they have and to be sparing with what they use. Trees

# The current courses available are:

Minecraft with Mods – ages 7 to 10
This creative and fun Minecraft summer camp
is packed full of learning, experimentation,
problem solving and creativity.

Once your child has mastered the secrets of Minecraft such as brewing potions and conquering the Nether – they will learn how to Mod a variety of different items that will take their Minecraft skills way beyond the basics.

Minecraft Engineering with Redstone – ages 9 to 12

Redstone is Minecraft's equivalent of electricity. We start by teaching how to use this energy to create the different logic gates.

Your child will then learn how these logic gates can be combined to create different circuits and complex electronic items such as calculators, elevators and more. They'll use all the skills they learn to design and build an amazing adventure course full of challenges, surprises and puzzles that players must navigate through!

that are logged will disappear forever unless replanted. Even then, they take time to regrow.

Animals can be hunted but will become scarce with time. To help with this, players can capture animals and manage them as livestock. Doing this can give players a steady source of eggs, wool, and meat.

Whatever the goal, Minecraft is an excellent way of teaching children that resources are limited and need careful managing.

#### 7. Patience and perseverance

A crucial component of resource and project management in Minecraft is patience. Even in Creative mode, where the player has access to unlimited blocks of every type, it takes enormous amounts of patience and perseverance to complete an ambitious project.

A large project can take anywhere from a few hours to a few months to complete. In light of this, children will often need the perseverance and self-discipline to see their projects through to the end.

However, owing to the freeform structure of Minecraft, many children may not even feel like they are learning these crucial skills and possibly getting smarter in the process.

Aside from this, Minecraft often requires patience and dedication to find the rarest of blocks, such as Redstone and Diamond. Managing farms, woodland, and livestock take time, and many of these tasks are not instantaneous.

Later on, as children learn to build traps and complex mechanisms, they will need the perseverance to work through failure. When a device fails, they will need the patience to step back and figure out why.

All of these are skills they will pick up naturally while playing since they are all crucial for succeeding in the game.

#### Quote

"Playing commercial video games can have a positive effect on communication ability, adaptability and resourcefulness... suggesting that video games may have a role to play in higher education. The study also suggests that graduate skills may be improved in a relatively short amount of time, with the gains reported here achieved over a period of eight weeks and representing just 14 hours of game play

#### Want to know more?

We hope this has given you enough of an insight into what FunTech can offer. There's lot more to see in our courses section – we don't just offer Minecraft coding camps.

At the core of all that we do are three principals; fun, education, and safety. We believe that at the end of our weekly courses you child will have learned invaluable skills, and could even be that Minecraft has made them smarter!

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What you need to know Minecraft? December 20, 2019

# Why Minecraft is more than just another video game

inecraft's creators revealed this week that the blocky freeform building game has 33 million users. It can easily become an obsession.

"You've exceeded your usage allowance," read the email from my ISP.

I was pretty sure I hadn't but I know a couple of people, my two boys, who might have done it for me.

That message clued me in to the depth of their obsession with Minecraft.

The game is set in a virtual world made of cubes of different materials - dirt, rock, sand, lava, obsidian and many more. Almost all of these can be used as building blocks and a few can be refined into usable raw materials (wood, iron, diamond etc).

Playing the game involves surviving by using blocks to build a shelter (which can be as crude or elaborate as you like) and turning raw materials and combinations of them into items (swords, armour, bows) to help kill the game's many monsters (creepers, skeletons, zombie pigmen etc).

From such an uncomplicated setting has grown a gaming phenomenon. The community of people involved with the game numbers in the tens of millions. Many of those fans are children, mainly boys, aged between nine and 15 - among whom it is almost a religion.

My two nine-year-olds - Toby and Callum - are devoted members of that congregation. They spend a lot of time playing Minecraft, talking about playing Minecraft and, as I found out from my ISP, watching YouTube videos of other people playing Minecraft.

For Liz Cruddas, whose two boys Oliver (15) and Will (9), are equally firm fans, the time spent glued to YouTube is baffling.

"I don't know why they want to watch these videos," she says, "but they are just fascinated by watching these people play the game."

Oliver Cruddas says he watches the videos, made by Minecraft celebrities such as Lewis and Simon from Yogscast, SkythekidRS, CaptainSparklez, BajanCanadian and CupQuake among others, so he can be a better player.

"There are some that help me with the game, they make it easier to play Minecraft," he says.

My son Toby echoes his comment and says he watches Minecraft videos for the same reason football players watch matches on TV. He sees what the best can do and gives him ideas about what to try in the game.

That's all very well but I, like many other parents with Minecraft-obsessed kids, wonder if they are wasting their time. Surely the whole experience can be made educational?

Perhaps it could be the route they use to get to grips with that most coveted of skills - computer programming.



"In the real world it is very rare for a kid to encounter a problem that programming would be a way for them to solve," says Daniel Ratcliffe, a game developer who has made a mod for Minecraft, called ComputerCraft, that adds programmable computers and robots to the game world.

By contrast, he says, Minecraft is rich in tasks that computer-controlled robots could help solve.

"If they play Minecraft, they are extremely invested in this world and can think of things that are real to them in that virtual world they can solve with programming."

But what about other technical skills - can their obsession demystify computers and networks?

"My sons are both managing their own servers with parental overview from me, and it's been a good experience in learning the issues that come from managing any server type system," says Andrew Weekes, whose two boys are big fans.

His younger son learned a hard lesson early on, says
Mr Weekes, when his failure to keep back-ups meant he
could not restore his favorite Minecraft world.

Playing Minecraft has also led his younger son to getting to grips with some basic computer concepts.

"We had discussions about Boolean logic (AND/OR/ NOT etc), which is a pretty advanced concept to be talking to a nine year old about."

The game also bestows some technical competence.

Any regular player will be adept at using the game's "slash commands", can install texture packs to change its look and make their own skins for in-game characters. They can find multiplayer servers, use email to set up sessions with friends and use Skype so they can shout at each other in games rather than just type comments. They might also be recording, editing and uploading their own YouTube videos of what they get up to.

Christy Wyatt, head of Good Technology and mum to another Minecraft fan, says parents might well be surprised at what their children have built in the game.

"My initial reaction was that it was just another video game," she says. "Now I think of it as digital Lego and he is using it to build all these amazing things."

Her son's fondness for the game has had other benefits too, ones that go beyond the computer.

"My son does have some challenges with the kids at school," she says "but Minecraft is the thing that

brought them together."

I've seen the same with my kids. I rented a server for them and it has become a hangout for them and some of their friends. It's a useful place, given that they tend not to just go out and play with their friends like their parents used to when they were young.

Teacher Joel Levin has seen the positive effect Minecraft can have on relationships among schoolchildren - especially on those who would otherwise be dismissed for being too geeky.

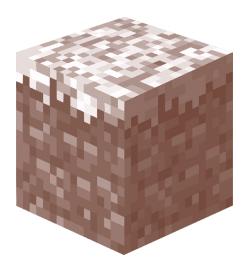
"Suddenly those computer skills become transferable into social capital," he says.

Mr Levin is the co-ordinator of Minecraftedu which was set up to show how the game can be used in classrooms. About 1500 schools are now using it as a teaching aid and not just in computer science lessons.

He also hopes Minecraft can teach parents a thing or two rather than them wanting the game to teach their kids.

"If this is something your kid is passionate about you owe it to them to take an hour or two to figure it out," he says.

And that's perhaps the best thing about the game - the shared times and stories we've had playing it together. Like that time we got ambushed by a creeper, which blew up and dropped us into a cavern, and we only had one torch and had to find our way back. Or the first time we killed the Ender Dragon or the time they showed me around the giant elaborate treehouse they had built and the... Well, you get the idea.



# Playing Minecraft May Make You a Better Artist

n the popular video game Minecraft, players imagine and build their own virtual realms with digital Lego-like blocks. The game's open-ended format and the problem-solving it requires have given rise to a theory that Minecraft attracts creative people, and is a means for creative expression that can boost creativity. Such purported positive benefits have led to the use of the game in school systems, as Microsoft, its owner, has promoted educational uses of the software. Until recently, the creative benefits of playing Minecraft had never been shown in a publicly accessible, scientific study.

Earlier this year, Jorge A. Blanco-Herrera, then a psychology grad student at lowa State University, published new research on the relationship between Minecraft and creativity. He worked with professor Douglas A. Gentile, a child psychologist who studies the effects of video games and other media on child development. Their work suggests that under certain circumstances, Minecraft may really stimulate creativity.

Blanco-Herrera sought to determine if playing Minecraft can have short-term positive effects on creativity. In the study, 352 undergraduate students were randomly split into four groups, each of which spent 40 minutes pursuing a different activity. There were two control groups: one played a NASCAR racing video game, while another one watched an episode of "Crocodile Hunter." The other two groups played Minecraft in "survival mode"—where players are given limited resources and presented with various challenges that require problem-solving. One Minecraft group, called the "directed" group, was told to be creative while playing; the "undirected" group was not given any instructions.

Gentile explained that many people have heard that Minecraft is a creative game, "so maybe by priming the idea of creativity, by getting it in their heads, that would actually help the creativity flow better."

After around 40 minutes of activity, the participants were asked to complete a series of tests that are widely used by researchers to measure creativity. In the alternative uses task, (AUT), which measures divergent thinking, or one's capacity to develop many novel ideas or solutions to a problem, participants must come up with a list of uncommon uses for everyday objects like paper clips and knives. Another test, the alien drawing task (ADT), measures creative production by asking participants to draw an alien; drawings are then scored against a rubric, with the least creative creatures resembling humans.

The researchers hypothesized that playing Minecraft would be more beneficial to divergent thinking and creative production than playing the NASCAR game or watching TV. They also expected that those Minecraft players who were told to be creative would have higher creativity scores than those who were not given those instructions.

What it found

The most significant findings from the study revolved around the difference between the

the two Minecraft groups. While researchers had expected the highest performance from those participants who were put in the mindset to be more creative, their counterparts actually scored much higher on the ADT. The participants who showed the greatest creativity—measured in this case by drawing imaginative alien creatures—were those who were free to play Minecraft without any specific intentions.

What it means

In the paper on the study, "Video Games can Increase Creativity, but with Caveats," the researchers wrote that "it may be the case that video games that specifically provide opportunities for creative thought and expression can provide beneficial creativity effects." The greater creativity of the undirected Minecraft group suggests that not only does it matter which video game you play, but the context in which you're playing is important, too.

The researchers noted that being told to be creative may have shifted participants' motivations or goals and directed their attention away from just playing the game. "The freedom of deciding how to play in the game could have led to the creative



benefit by giving the participants more open-ended decisions to make," the study offers.

Gentile noted that other causes for the directed group's lower scores could be that since it's difficult to be creative, they may have resisted the directive. Or, perhaps, "if creativity is kind of like a muscle," he hypothesized, "as you use it, it gets tired. And so, maybe they were more creative in the gameplay, but then by the time we were measuring creativity after gameplay, they had nothing left."

These results suggest that if you decide to play Minecraft with the intention of sparking creativity, it may not be effective. However, further research could investigate if playing the game over a longer period of time might be beneficial.

If you play Minecraft for several days, Gentile suggested, and if creativity is like a muscle, then maybe that muscle can get stronger over time. "It's tired right after the exercise, but maybe after a week of exercise, it starts getting generally stronger," Gentile offered. "We don't know yet, and I think that's where the really cutting-edge of this science is."

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