A Family Guide and FAQ to MINECRAFT
Insights from a Research Project

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Overview

Minecraft[1] is a video game that has sold over 23 million copies for PC/Mac platforms alone.[2] Minecraft is popular among all ages but has found a particularly strong following among youth. Because it provides tools for kids to design, create, problem-solve, and collaborate, the game offers significant potential for a range of valuable learning opportunities. Educators are harnessing that excitement by incorporating Minecraft into classroom, after-school, and online activities about computational thinking; core math, science, and technology (STEM) topics; storytelling; and beyond.[3] However, not only are young people learning with Minecraft in school, they might also play and socialize at home.

It can be difficult for parents and other caregivers to understand the variety of complex ways in which their children may engage with the game, both in the world of Minecraft itself and in activities related to the game (e.g., YouTube videos or online forums in which Minecraft users exchange information about the game). As a parent, you might also be concerned about potential safety risks that your child may face while engaging with others online.

To help address some of these concerns, this guide describes different ways to play Minecraft, interact with Minecraft-related media and communities online, and learn with the game. It also describes some of the risks that young people may face when playing Minecraft. Some of the frequently asked questions (FAQs) below include:
- What does my child do when they play Minecraft?
- How can Minecraft encourage learning?
- Should my child be playing with others online?
- How can I prepare my child to go online?

In this guide, you'll find definitions of key terms (to help you understand your child's virtual environment), frequently asked questions, and suggestions of other resources. This guide was developed through conversations with the Connected Camps team and written by university-based researchers who have studied how young people are using Minecraft; as such, it is an independent assessment and has not been reviewed by Minecraft. We hope you'll find it useful as a starting point for helping your child cultivate a positive Minecraft experience across educational, social, and other dimensions.

Modes of Play

Minecraft is a **sandbox game**.[4] Similar to a child's physical sandbox, a sandbox game is one without a great deal of structure or direction. A player is instead able to choose how they want to interact with the available choices and content provided by the game. Play is derived from open-ended choice, where players have the freedom to create, build, and destroy as they please.

In Minecraft, players **mine** blocks they find in the world (made up of primarily natural resources, such as wood, water, and stone) to build, or **"craft,"** their own creations, such as houses, castles, or anything else a player can imagine.

Its open-ended design creates many exciting opportunities for gameplay, including the collaboration of many players to build large and intricate structures. Players can interact with computer-generated characters, such as animals or zombies, and can communicate with other players via a text chat-based system. The game provides a valuable creative outlet for many young people. Depending on the mode of play, there may be some game objectives, but there is no "typical" Minecraft experience.

There are a few different ways to navigate Minecraft. These modes significantly change the way players interact with the game, enabling players and families to tailor how peaceful (e.g., monster-free) and difficult (potential for player death) their Minecraft experience is:

* **Survival:** Survival Mode has many limitations and challenges that prevent players from building, including the need to collect blocks to use for construction, manage resources, maintain their health (players die if their health takes too much damage), and fight off auto-generated foes (known as **mobs**).[5] Players can gather materials that can be used to synthesize new items to assist them in the game. Survival mode appears to be the most popular mode of gameplay.[6]

* **Creative:** Creative Mode removes all the challenges of Survival and makes it easier for users to build and destroy, by giving players infinite resources and unrestricted abilities (e.g., can destroy all blocks, can fly, cannot take damage).[7] These features make it possible for players to easily create large structures.[8]

* **Adventure:** Adventure Mode allows for "player-created maps" and prevents griefing by limiting players' ability to destroy blocks.[9] Adventure has many of the same restrictions as Survival.

* **Hardcore:** Hardcore Mode is a variation of Survival, where players must restart a game every time they die, instead of picking up where they left off.[10] Players have an opportunity to save their world once they have died, but they can no

longer continue the game.

* **Spectator:** Spectator Mode enables a player to zoom out if they choose to, allowing them to fly across the world of the server. Though players can see everything going on, they are invisible and cannot interact with the world, though they can still use the chat functionality to communicate with other players.[11]

Frequently Asked Questions

What does my child do when they play Minecraft?
Every child's Minecraft experience is different, and that experience is largely dependent on the game, on the server that is used, and who is playing on that server. A **server** is a computer that hosts a Minecraft world. Administrators (**admin**) operate the server and have control over who can access the it.[12] Minecraft can be hosted on a personal computer and configured in different ways.[13] Organizations and companies can also host Minecraft servers.

A child playing Minecraft could play single player mode while being physically with their peers, play multiplayer using a local area network (**LAN**)[14] with peers, or play on a multiplayer server with others online.[15] They could play in Survival and fight off mobs, or play in Creative Mode by exploring or building on their own.[16] They can also build based on instructions provided by a teacher at school. The world can be used for individual play, collaboration, educational instruction, and much more.[17] Organizations, including schools, have begun to set up servers specifically for children to learn using Minecraft. In fact, as of a few years ago, it was reported that "more than 250,000 students have used Minecraft in their schools in more than 40 countries and… over 2,000 schools use [Minecraft] today."[18]

How can Minecraft encourage learning?
Games like Minecraft have been shown to have benefits for both learning and emotional growth, including:
* enhancing creativity;
* developing visuo-spatial reasoning;
* increasing motivational skills;
* building problem-solving skills; and
* developing abilities to set and reach goals.[19]

These skills can be gained in either singleplayer or multiplayer modes of game play. However, multiplayer games have been shown to build confidence in young people and help them develop strong social skills.[20]

Should my child be playing with others online?
Many parents are concerned about **cyberbullying**, a term used to describe many forms of online harassment. We don't have prevalence data for Minecraft specifically,

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but some studies about negative content online more broadly report that one in ten youth may experience cyberbullying online,[21] though it is less likely to affect younger children.[22] This harassment is usually repetitive and can be conducted by multiple people.[23] Cyberbullying can also take many forms, including griefing and trolling:

* **Griefing** is a malicious form of harassment in which players, by themselves or in coordinated teams, will systematically destroy other players' creations and/or steal their resources.[24] The destruction is meant to rile up others, and is looked down on by most players. This form of bullying is associated with Minecraft in particular and tends to be the greatest potential threat to Minecraft players.

* **Trolling** is a form of harrasment where users attempt to annoy others by saying controversial statements or trying to trick other users into doing something foolish, such as giving up their equipment or dying and having to start over. Trolls are often considered to be annoying and joking rather than harmful.[25]

While parents may still be concerned about their child's well-being while interacting with others online, the many benefits to online gaming for kids and teens often outweigh the risk of harassment in many cases. Just as in more traditional social environments, young people need positive experiences and adult guidance in order to learn how to be good digital citizens. Simply prohibiting social interaction will not allow children to build those skills.[26]

Learning to be online responsibly helps build **resiliency**. Resiliency is understood as "the ability to overcome serious hardship," and its development is generally encouraged by child development experts.[27] According to experts, "moderate levels of risk provide opportunities to learn how to overcome adversity."[28] Responsible online use has been shown to help develop resiliency in young people,[29] and resilient youth will be able to better handle the risks of being online.[30]

There are also strategies that can be used to prevent, reduce the risk of, and manage the effects of cyberbullying. Keep reading to learn more!

Is Minecraft safe for my child?
The easiest way to prevent bullying is to play a single player game. However, as discussed, there are good reasons for your child to want to play with others online. Common solutions for creating safe and moderated multiplayer gameplay include setting up a so-called whitelisted server, using a family friendly server, or using a LAN.

A **whitelist** is a list of usernames to which a server will grant access, while denying access to all others.[31] Setting up your own server and whitelisting approved users that can access it is a good way to control who can interact with your child online, as it is simple to add and remove players from the list. There are relatively easy instructions on how to do so online,[32] and Minecraft also offers an official version, called Minecraft

Realms[33] which is easy to use. Some third parties also host family-friendly Minecraft servers (some of which have whitelists and others which do not), including Connected Camps,[34] Cubeville,[35] The Sandlot,[36] CrazyPig,[37] and more.[38]

While some Minecraft servers have trouble with visits from griefers (users who attempt to destroy other players' work or steal their resources), other servers support communities of users which take steps to prevent bullying, which can foster friendship and bring users together.[39]

You can set up a LAN so players that are in physical proximity to each other can play in the same game.[40] Minecraft Pocket Edition,[41] the Minecraft app for mobile devices, will also allow anyone on the same wireless network to collaborate with each other in the same world. By using this app, children can play with their friends in the same physical location on a private Wi-Fi network.[42]

How can I prepare my child to go online?
Your child may not be familiar with the norms of being online, as well as the potential risks. Many cases of griefing involve players unfamiliar with the expectations and core values of the community they are joining. Players may grief through ignorance by "building on someone else's plot, dismantling someone else's structure, flooding chat channels with what amounted to spam."[43] For example, a new player who joins a world might see a quarry and begin mining there, without knowing that the quarry belonged to another player. That player might then be banned by an admin without ever receiving feedback about their mistake.[44]

During Connected Camps' 2015 Camp Minecraft, counselors found "that in the vast majority of cases griefing issues were due to a misunderstanding between players and their boundaries, rather than malicious intent. Kids didn't mean to grief; they just didn't understand how to communicate."[45] Each community has its own norms, so players entering a new server should be observant, considerate, and ask questions before beginning game play, in order to avoid a misunderstanding. Players could introduce themselves to other players;[46] ask others for advice before building, destroying, or gathering resources; or ask about norms or rules of the server.

Your child may not be familiar with all of the potential risks of being online. A discussion with your child about bullying, trolling, and griefing may help your child identify these activities and minimize the likelihood that your child will be a participant in these and other negative online activities. Then, discuss strategies for dealing with these types of encounters should they arise and encourage your child to share any uncomfortable or challenging experiences with you, their friends, teachers, or other trusted adults.

Additionally, **digital literacy** skills can help children successfully overcome cyberbullying. Digital literacy "refers to fluency in the use and security of interactive digital tools and searchable networks."[47] Children's ability to responsibly use technology can in-

crease resilience, reduce the risk of cyberbullying, and give them the tools they need to successfully deal with online harassment.[48] To foster digital literacy, you should show your child how to use a search engine to find answers for themselves and drive their own learning, but ask them to reach out to you if they do not understand something they see online.[49]

What should I do if my child is bullied online?
Some of the factors that can help young people deal with negative online experiences include:

* "Confiding in an adult;"
* "Talking about the experience with someone;"
* "Being digitally literate;"
* "Having parents who facilitate [and support] their children's online media environment;" and
* "Having supportive peers."[50]

It can be important to support your child's online explorations, which will help them learn to be a better digital citizen, even if you and your child decide to limit the amount of time they can spend interacting with technology. You may want to also encourage your child to share with you reflections on their online experiences. Additionally, while parents sometimes want to restrict Internet use in response to cyberbullying, children often use the same technology to reach out to their support network of peers, which can help them "cope with distressing events."[51]

What should I do if my child is a cyberbully?
Parents may find it troubling to find out their child has been engaged in bullying behavior. If this happens, try to find out why they bully and explain the severity of their actions. It's possible that your child may not understand how their actions are affecting their peers online. Your focus should be on your child's well-being and the well-being of those with whom they interact, rather than on only disciplinary action, as "some of those who bully others have also been bullied themselves."[52]

You should ask them to stop the bullying immediately. It may be beneficial to more closely keep track of your child's online behavior (via regular conversation and/or thoughtful implementation of monitoring software), perhaps helping them to think through what kinds of actions they could take online instead. However, this activity is a serious infringement of your child's privacy. If you monitor your child's behavior, you should establish limits on your surveillance with your child, including a timeline and what activities will be monitored.

Guides

Minecraft is a rich online environment with a lot of how-to guides and tutorials appropriate for new and returning users and their parents/caregivers. Here are a couple that might help you get started:[53]

* Common Sense Media: "Everything You Need to Know About Minecraft"
  https://www.commonsensemedia.org/blog/everything-you-need-to-know-about-minecraft

* How-To Geek: "The Parents' Guide to Minecraft"
  http://www.howtogeek.com/210923/the-parents-guide-to-minecraft/

* The CyberSafety Lady: "A Parent's Guide to Minecraft"
  https://thecybersafetylady.com.au/2014/08/a-parents-guide-to-minecraft/

* Yahoo! Tech: "A Parent's Guide to Minecraft: 5 Reasons to Stop Worrying and Learn to Love the Cubes"
  https://www.yahoo.com/tech/five-reasons-parents-need-to-stop-worrying-and-learn-to-83359212475.html

* Mine Mum: "Ten Problems that Parents Can Have with Minecraft"
  http://minemum.com/minecraft-parent-problems

* Mine Mum: "Ten Things for Parents to Love About Minecraft"
  http://minemum.com/minecraft-parents-things-to-love

Conclusion

Minecraft provides many opportunities for its young users, both good and bad. We aim to support positive, meaningful experiences for young people using Minecraft. We hope that this document can provide some guidance for families on how to create those experiences.

Acknowledgments

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7   "Creative," *Minecraft Wiki*, last modified May 17, 2016, http://minecraft.gamepedia.com/Creative_mode.

8   For examples, see http://mashable.com/2013/02/13/amazing-minecraft-creations.

9   "Adventure," *Minecraft Wiki*, last modified May 12, 2016, http://minecraft.gamepedia.com/Adventure.

10 "Hardcore," *Minecraft Wiki*, last modified May 1, 2016, http://minecraft.gamepedia.com/Hardcore.

11 "Spectator," *Minecraft Wiki*, last modified May 12, 2016, http://minecraft.gamepedia.com/Spectator.

12 See subsection on "Managing and maintaining a server" at "Server," Minecraft Wiki, last modified May 15, 2016, http://minecraft.gamepedia.com/Server#Managing_and_maintaining_a_server.

13 "Server," *Minecraft Wiki*, last modified May 15, 2016, http://minecraft.gamepedia.com/Server.

14 A local area network (LAN) is a network that can only be accessed through your router or switch. Using a LAN for *multiplayer* can limit gameplay to only those with access to your wired or wireless network. You can find instructions on how to set up a LAN world online here: http://minecraft.gamepedia.com/Tutorials/Setting_up_a_LAN_world.

15 Multiple players accessing the same server to play Minecraft, which may or may not be moderated by an admin. Most modes of gameplay are possible with multiple players. For more information: http://minecraft.gamepedia.com/Multiplayer.

16 Players could also peacefully play in Survival Mode and explore/build (but be forced to maintain health and continue to risk death), or play in Creative and fight off mobs (but have more materials to do so).

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28   Mizuko Ito, Kris Gutiérrez, Sonia Livingstone, Bill Penuel, Jean Rhodes, Katie Salen, Juliet Schor, Julian Sefton-Green, and Craig S. Watkins, *Connected learning: an agenda for research and design*, (Irvine, CA, Digital Media and Learning Research Hub, 2013), 30, 46. https://perma.cc/MZ36-JC3F.

29   Livingstone et al., "Risks and safety on the internet," 144.

30   "How to Set Up a White List or Make Your Server Private," *Beast Node*, last accessed May 17, 2016, https://perma.cc/F7PY-MB9B.

31   "How to Set Up a Minecraft Server," *Minecraft Sandbox*, last accessed May 17, 2016, http://minecraftsandbox.com/how-to-set-up-a-minecraft-server.

32   *Connected Camps*, last accessed May 17, 2016, http://connectedcamps.com.

33   *Minecraft Realms*, last accessed June 27, 2016, https://www.minecraft.net/en/realms.

34   *Cubeville*, last accessed May 17, 2016, http://www.cubeville.org.

35   *The Sandlot*, last accessed May 17, 2016, http://www.sandlotminecraft.com/index.php.

36   *CrazyPig*, last accessed May 17, 2016, http://crazypig.enjin.com.

37   Matt Doyle, "11 family friendly minecraft servers where your kid can play safely online," *Brightpips*, last modified June 3, 2014, https://perma.cc/VP5Q-HZHG. Specific websites are mentioned only as examples to provide additional insight into available resources for parents. These examples should not be understood to constitute any type of endorsement of a particular website or service by the Berkman Center for Internet & Society at Harvard University.

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