The Best Games & Apps For Children

With ADHD

How To Learn With Games and Apps

If you are a parent of a child with ADHD, sometimes it's hard to figure out what will actually help them. Traditional methods like medication can be helpful, but also have very clear side effects. Behavioral and educational strategies are modestly helpful but are often difficult to implement and require sustained point-of-performance involvement on the part of parents and teachers. Tools such as biofeedback and nutritional strategies have only limited support in research.

Video games and other digital technologies are being courted as the latest approach to helping children with ADHD. The good news is that the evidence for using these technologies is very promising. There is rigorous research to show that working memory training programs can increase children's working memory skills, actually change their brains, and improve their performance at school and home. Using technologies such as voice recognition systems, iPad apps, and a myriad of smart phone organizational and productivity applications can be immensely helpful in supporting individuals with ADHD.

Here are a variety of different approaches to using apps, games, and technologies to help kids with ADHD:

1. **Play popular video games to improve academic and executive functioning skills.**

   Advocates of using video games to help kids with ADHD see them as being cognitively challenging. This approach is one where parents let their children play popular video games that practice problem solving, memory, and focusing skills.

Games such as *Portal 2*, *Starcraft*, and many of the *Legend of Zelda* games have been identified as helpful for kids with ADHD.

2. **Use proprietary video games and technologies specifically designed to improve underlying deficits of ADHD**.

   The most effective, well researched tool is Cogmed Working Memory Training. This tool has been demonstrated to improve many ADHD symptoms, as well as helping with academic and executive functioning skills. Technologies, such as those produced by SmartBrain, use neurofeedback to teach a child to focus their attention. Other technologies that show promise include Captains Log and Play Attention.

   - **Cogmed Working Memory**

     Cogmed Working Memory Training is a research-based, clinically proven computer-based program designed to improve memory capacity through targeted, regimented exercises. Children with ADHD often have difficulties with Working Memory skills. This very common phenomena can impact their ability to follow directions, recall simple daily routines, and retain academic information. Many of the fifty plus peer-reviewed published studies of Cogmed Working Memory Training have demonstrated its utility in helping children with ADHD.
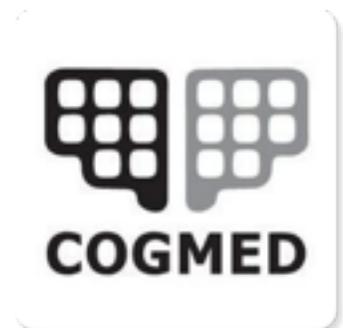
3. **Select digital technologies to support areas of weakness for children with ADHD**.

   This approach uses digital technologies to offset an area of ADHD vulnerability, like glasses for someone with poor vision. Apps such as *Evernote*, *YouNote!* or *myHomework* all provide tools that can aid children with difficulties in Organization, Planning,and Working Memory. Typing and speech recognition

programs have been demonstrated to help with the writing difficulties experienced by many children with ADHD.

- ***Evernote***

  Evernote is an easy-to-use organizational app available for note taking and archiving. Children with ADHD often have difficulty with organization, planning and/or working memory. Evernote allows children to take an endless amount of notes, sort these notes into notebooks, and then further organize their content with tags.

- ***YouNote!***

  YouNote! is a flexible note-taking app that facilitates drawing, typing, and voice-recording personalized notes. The app can also utilize GPS to record where notes are taken, and a contact list can be used to tag others in notes. You note! can help children with ADHD in organization, planning, flexibility and working memory.

- ***myHomework***

  myHomework is a useful scheduling and organizational app available both online and as an app for iOS and Android platforms. Children can record their class information, build schedules, list assignments, and tie it all together with a calendar that marks due dates and class times. This app can help children with ADHD in organization, planning, time management and working memory. This app will help children to be able to remember and plan for homework assignments and projects.
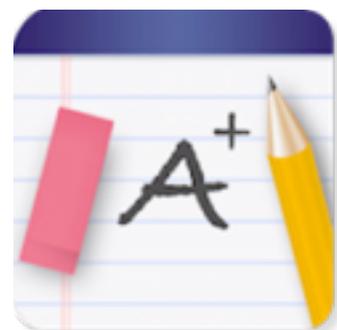
4. **Use video games that promote vigorous physical exercise that leads to improvement in executive-functioning skills.**

Studies detailed by John Ratey in his book *Spark: The Revolutionary New Science of Exercise and the Brain* demonstrate how kids and adults who exercise with energy and regularity can improve skills such as attention, emotional regulation, working memory, cognitive control, and focus. In fact, one of the primary treatments promoted for children and adults with ADHD is regular exercise. There are also data suggesting that the complex body movements used in martial arts, tennis, and fencing can promote these skills and lead to academic improvements. However, getting people to exercise is not always the easiest thing to do, so using technology to increase motivation and compliance can be powerful.

Video games, apps, and other new technologies present promising strategies to help people exercise more. Tools such as the Fitbit, Jawbone, and the Apple Watch help people keep track of their exercise and get positive feedback on a daily basis. Additionally, there are compelling data that suggest that "exergames," or active video games, can burn calories as well as improve executive-functioning skills. Research also indicates that children who play sports video games tend to increase the amount of time they engage in playing sports and being active. Based upon this information, here are some of our recommendations for games that promote exercise and improve executive-functioning skills:

- *Kinect Sports Rivals:*

Compilation motion-based sports game that uses Xbox One's "Kinect" sensor to detect player movements. Games include bowling, jet-ski racing, rock climbing, soccer, target shooting, and tennis.
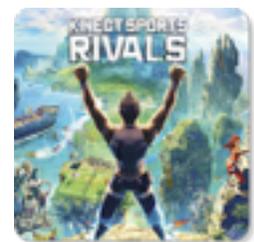
- *Kinect Sports: Volleyball:*

An active game where users gesture into a motion sensor on the XBOX 360 to volley, serve, block, and spike.
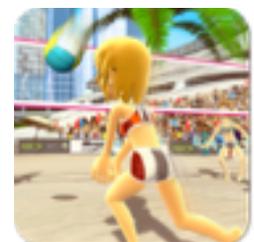
- **_Wii Sports: Baseball:_**

  Active baseball game for the Nintendo Wii, where players hit, throw, and field using the Wii Remote.

5. **Use video games as teaching tools.**

   In this approach, parents, educators, and the kids themselves learn to transfer game-based skills such as planning, cognitive flexibility, time management, and organization to real world situations. This approach goes beyond the games themselves and uses the games as an opportunity for the children to learn about the skills, practice the skills in a fun and engaging manner, then applying the skills in their real life. This approach requires work but holds great promise as video game play is a highly motivating task to many children with ADHD.

6. **Make it fun to improve time management, focus, and working memory skills.**

   These skills are crucial to good academic performance. There are many apps and games to improve these skills. But there is an important caveat when explaining their effectiveness: these apps are only useful when a child fully engages with them, and learns how to effectively put them to use. In the same way that many ADHD kids are given planners and agendas in the classroom and may choose not to use them, an app that might help them with scheduling, remembering homework and school projects, and keeping themselves organized can only help if users engage with it.

   The following apps and games are recommended for providing fun opportunities for your child to practice and develop some of these skills.

   - **_Bugs and Buttons 2:_ (Ages 3-6)**

     Many of the goals and objectives specific to each mini-game require users to zero in on small details. Matching, finding patterns, and locating small bugs

takes keen concentration and attention to detail. Given the fact that there's a small reward and goal to work towards, (collecting additional bugs) users must demonstrate a degree of goal-directed persistence (the ability to carry out an activity until completion) as they perform the various tasks the app presents.

- ***Tupsu (The Furry Little Monster):*** **(Ages 7+)**

    Quite a few levels in the game are tricky enough to stump a player for five or ten minutes, or more! Strong focus skills are the key to sticking with things when she is stalled or at a loss. Persevering and staying driven when confronted with a good challenge is the key to success in this tricky game. The less she applies her focus skills while playing, the less likely she is to make steady progress in *Tupsu (The Furry Little Monster)*.

The Following apps will help Improve Working Memory:

- ***Roblox Studio:*** **(Ages 4+)**

    A robust program with a number of customizable options and tools, *Roblox Studio* requires users to learn a number of functionalities in addition to where and how to deploy these tools. Creating a new "Place" involves populating the landscape with pre-designed blocks, scenery, and architecture. Working memory is required to recall where items are located within the menus, how to utilize the different tools for arranging and building with these objects, and altering their texture and appearance.

- ***GeoDash:*** **(Ages 6+)**

    While playing *GeoDash*, users must actively formulate strategies to pass through each level. It is often a multi-step process, requiring players to retrace their steps and use a combination of
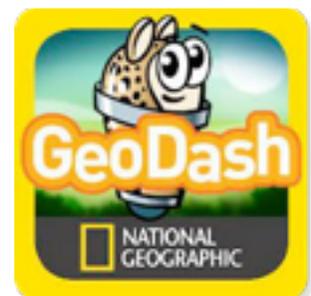
"special powers" to successfully enter the portal. Recognizing the proper time to use a "burrow" technique or a "double jump" demands careful attention to detail during gameplay. The game implements the basic scaffolding teaching method, wherein users are slowly introduced to new abilities and more difficult challenges. Being able to absorb new gameplay strategies and use them in each ensuing level require exercising Working Memory. Users with solid working memory skills will generally be able to complete a level on their first or second attempt, while users who struggle with their working memories may need 3 or more tries to completely complete a level.

The following Apps Will Help Improve Time Management:

- *Hay Day:* **(Ages 6+)**

  There are few game types better than a simulation type for illustrating the concept of time management, and many children will find find the idea of overseeing their own farm operation appealing. Players begin the game with a small selection of crops (corn, wheat) and animals (chickens). The cyclical concept of growing food to feed animals that provide us with food is quickly made apparent. These processes take differing amounts of time; if a player wants eggs to sell, they have to wait for chickens to produce them, and they must feed the hens when they are done laying. But chicken feed takes time to make, as does growing the corn it is comprised of; it becomes necessary for players to efficiently juggle the subtasks that fall under the larger process of producing eggs for the community. Good time management is needed to ensure there aren't too many gaps in production.

ChoreMonster: (Ages 3+)

For parents who would like to see their children complete their chores in a timely manner, the "I'll get around to it" line does not fly. It doesn't mesh with the functionality of *ChoreMonster*, either. In order to receive any points, users must finish the task in a timely manner (especially since points can be revoked at any time through the parent account). The app helps take the tension out of assigning household chores, as the app essentially becomes the chore administrator. Be sure to set each chore to recur throughout the week, especially if it's a daily activity like making the bed or brushing teeth. This way, users will always know to set aside enough time to complete each new chore.

Many children with ADHD can improve their school performance by using apps that help them to organize writing assignments and completing their homework. When a child with ADHD masters these apps, the difference in their school performance can be dramatic. For example, the contrast between listening to an audiobook rather than struggling to fluently read a book can be transformative, Some kids with ADHD who hate reading due to their attention problems can sustain their focus with an audiobook and become avid readers.

The following apps and games are recommended tools to improve organization, writing, and task completion:

- *inClass:*

inClass is an essential tool for children who wish to keep a detailed list of important class material and create a clear schedule for managing their work. Being prepared for individual classes will help children with ADHD become more organized learners. *inClass* is most effective when tasks are broken down daily and hourly, allotting dedicated slots of time long enough for assignments to be thoroughly attended to and conveniently worked into users' schedules.

- *Audiobooks:*

It can sometimes seem that children with ADHD have an innate aversion to reading. Due to difficulties with attention and focus, it can be hard for them to tackle traditional reading activities. That's why audiobook apps are such an effective tool for these children, as they can be used to supplement traditional reading or pique an interest in books. By listening to audiobooks while reading along with a text version, children will can internalize important skills in phonics, phonemic awareness, and overall comprehension.

- *Inspiration Maps:*

Inspiration Maps is a brainstorming app that offers a
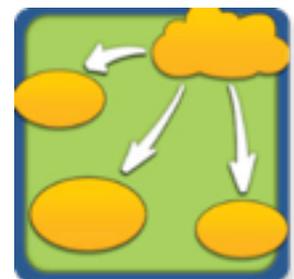
range of strategies for helping students do everything from writing an essay, to planning out a lab report or researching a paper. Children can organize their existing notes simply by uploading them into the app. They can also create original sets of notes, and properly categorize them into one of the app's 30 templates. Report outlines, compare and contrast analysis, Venn diagrams, and linear thinking charts like the KWHL help users visually present their thoughts and ideas with clarity. Because Inspiration Maps is a limitless graphic organizer and a great study tool, we believe it is one of the most recommended apps for ADHD.

- ***Diigo:***

Kids with ADHD will often waste time if they are not given direction, especially when it comes to searching the web. *Diigo* is a web-searching tool that allows kids to highlight, post sticky notes, and make annotations on a page while browsing. Referred to as a "social bookmarking website," *Diigo* allows children to organize favorite sites with bookmarks and tags, making it extremely useful for writing research papers that require multiple sources, as it helps to synthesize and organize large amounts of content. Essentially, *Diigo* hastened research process, making it easier to retrieve information.

- ***Idea Bucket:***

Idea Bucket is an app that makes it easy to weigh options before making a decision. This helps users to lay out their ideas in an organized fashion and make thoughtful, well-informed decisions. Using Idea Bucket requires users to stop and think about their choices before making a decision. This can be an especially helpful strategy for children with ADHD, who tend to make impulsive decisions without considering all of the options and consequences.

There is no question that technologies can be a powerful ally in helping children overcome the symptoms of ADHD. Finding the best games and apps for your child requires that you understand the needs of your child, and that you can find the right technologies to address these concerns. Once you found the best tools to help your child, it is imperative that your child learns how to use these technologies effectively and applies them routinely when needed. It is not enough to know what to use. It is more important that your child knows how and when to use the technologies, so that they can help reduce the impact of ADHD.

Introducing LearningWorks for Kids

So much more than just game and app reviews…

LearningWorks for Kids is an individualized, in-depth, interactive parents' guide for raising happy, healthy kids in a digital world.

Finding the right apps for your child is hard. We make it easy.

Parenting has always been hard, and while technology is supposed to make our lives easier, sometimes just trying to understand it is the hardest part of all.

At LearningWorks for Kids our mission is to help parents make sense of the digital world. We'll show you how to use today's most innovative technologies to improve critical thinking, strengthen academics, and manage difficult learning challenges like ADHD and Autism.

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