

Improve Working Memory

Working memory is the ability to keep things in mind while performing an activity. It helps in remembering while you are in the process of learning. It involves the maintenance of information in mind so that an individual can use it for planning, learning, reasoning, and producing a result. Working memory helps to hold a thought or long-term memory in mind so you can act more efficiently in the present moment. For example, working memory might involve shutting off a television and remembering to gather one's coat and backpack before leaving a friend's house. Improve working memory by following our recommendations below.

Home and School Situations Requiring Working Memory

- Taking notes in class
- Recalling plans made or an assignment due date
- Remembering the rules to a game or sport while playing
- Following multi-step directions at both school and at home
- Doing math computations in one's head
- Recalling answers to reading comprehension questions
- Remembering a list of chores, items, or tasks

Hints and Strategies to Improve Working Memory

1. Simplify directions as much as possible. Your child will be more likely to recall short, simple, and direct instructions. For example, saying, "When you finish those two math worksheets, you can watch one episode of 'Adventure Time'," is much more direct than saying "When you finish your homework you can watch some TV."

2. Encourage your child to seek assistance from others. Emphasize to your child that it is acceptable to ask the teacher to repeat instructions or to ask a classmate to borrow their notes. Role-play these scenarios at home so that your child will feel comfortable when the situation arises.

3. Find a mode of technology that is helpful to your child. For example, use a tape recorder to record notes or directions, or a cell-phone to program in reminders and scheduling changes. Digital picture frames can show a sequence of activities that are easily forgotten, such as eating breakfast, putting dishes away, and washing up.

4. Practice verbal memory like rehearsal, chunking, or mnemonic devices. Help your child to rehearse by whispering directions or lists to him/herself. Also, practice chunking devices that can help your child to whittle down two-step instructions to one, such as brushing her teeth and washing her face together. Mnemonic devices can be especially helpful, such as how ROY G BIV is often used to recall the colors of the rainbow in order.

5. Practice reading comprehension. Read the same material as your child and then have a brief discussion about it. This may help to increase your child's focus and stretch their memory as an active component of working memory skills.

6. Showcase your own working memory difficulties by dramatizing your strategies to compensate for them. Many adults report difficulties with working memory in simple tasks such as remembering what they meant to do when they went into the kitchen or leaving the house and forgetting something important. Use compensatory strategies such as making notes, using Post-its, asking someone else to give a reminder, or doing something immediately when it comes to mind. Exaggerating and dramatizing your strategies for compensating your own working memory difficulties may be

helpful for a child who has similar difficulties.

7. Select video games for your child that require the use of working memory skills. Brain training games, such as “*Mind Quiz*” and “*Brain Age 2*,” require the use of working memory skills and visual memory tasks. Other longer narrative games, such as “*The Legend of Zelda*” series, require the player to keep in mind incidents and objects from earlier in the game in order to be successful in strategies on later levels. Most importantly, try and get your child to recognize how memory skills can help in games and encourage your child to try out different strategies. These strategies can include the following: visualizing what (s)he needs to remember, over-learning math facts so that they become automatic, and repeating things out loud. These strategies may help your child in a number of memory tasks.

Games and Activities That Can Practice Working Memory

Playing board games – Most board games require players to use working memory to recall rules, remember whose turn it is, and relate the spin or roll to the appropriate move. Asking your child to help you remember what happens next in the game will even further improve this working memory activity.

Grocery shopping trip – Ask your child to help you keep track of the next three or four items you have to find. Have your child count them as you find each one.

“Memory” – This card game challenges players to match pairs of cards by turning them over two at a time while they are face down, allowing your child to practice his working memory skills.

“I packed my suitcase” Game – Players in this game have to

picture and remember an increasing list of items. One child starts by saying, “I packed my suitcase and in it I put a toothbrush.” The next player repeats that phrase and then adds another item. This game can continue for as long as the players enjoy adding more items, and remember what came before what they’re about to say next.

“Big Brain Academy” – This game requires your child to keep facts in mind in order to successfully play the game.

Websites and Articles on Working Memory

[LearningWorks For Kids](#): The premier resource for executive function information, offering a detailed explanation of working memory, tips for parents, and activities to improve this skill.

[U.S. News and World Report](#): This article discusses the inconsistency of working memory in children with ADHD.

[ADDitude](#): This site offers 15 expert tips for boosting memory and improving academic performance in students with ADHD or learning disabilities.

[Parents](#): This nice, easy-to-read article provides parents with information on how to improve their child’s memory skills, mentioning certain games, as well as strategies.

Books on Working Memory

[Brain Hacks: Work Smarter, Stay Focused, and Achieve Your Goals](#) by Lara Honos-Webb, PhD. (Ch. 2) “Filled with actionable strategies proven to improve focus, increase productivity, and promote well-being, Brain Hacks will help you transform the way you work, live, and feel by tapping into the power of your executive functioning skills.” – Amazon

[Executive Functioning Workbook](#) by Melissa Mullin, PhD. and Karen Fried, Psy.D. (Unit 8,9)“This EXECUTIVE FUNCTIONING WORKBOOK increases student’s ability to plan, start, and finish work independently. It identifies student’s aims and challenges, builds thinking skills, and provides tools to help build organizational strategies.”- Amazon

[Executive Functioning Skills Printables Workbook: For Students Learning Life Skills](#) S.B. Linton (Pg.27-32)“For teens and youth with special needs. These are Executive Functioning Skills Printables Worksheets for Students with Autism, Similar Special Needs, ADHD, LD and Executive Functioning Needs.”- Amazon

[Executive Functioning Workbook for Kids: 40 Fun Activities to Build Memory, Flexible Thinking, and Self-Control Skills at Home, in School, and Beyond](#) by Sharon Grand, PhD, BCN.(Ch. 4)“Help kids grow their executive functioning skills with activities for ages 6 to 9!”- Amazon

[Learning How to Learn: How to Succeed in School Without Spending All Your Time Studying; A Guide for Kids and Teens](#) by Barbara Oakley, PhD, and Terrence Sejnowski, PhD. (Ch. 8)“Learning How to Learn teaches them about the importance of both focused concentration and letting their minds wander, how the brain makes connections between different pieces of information, the value of metaphors in developing understanding, why procrastination is the enemy of problem solving, and much more.” – Amazon

[Playing Smarter in a Digital World: A Guide to Choosing and Using Popular Video Games and Apps to Improve Executive Functioning in Children and Teens](#) by Randy Kulman, Ph.D. (Ch. 10)“A book to help parents to make their children’s digital playtime educational”- Amazon

[Smart but Scattered: The Revolutionary “Executive Skills” Approach to Helping Kids Reach Their Potential](#) by Peg Dawson,

Edd, and Richard Guare, PhD (Ch. 12)“Small changes can add up to big improvements–this empowering book shows how.”- Amazon

[Scattered to Focused: Smart Strategies to Improve Your Child's Executive Functioning Skills](#) by Zac Grisham (Ch. 6)“Set your child up for success with simple strategies to develop executive function in kids 4 to 12”- Amazon

[Smarter: The New Science of Building Brain Power](#) by Dan Hurley (Ch. 1)“Smarter penetrates the hot new field of intelligence research to reveal what researchers call a revolution in human intellectual abilities.”- Amazon

[The Conscious Parent's Guide To Executive Functioning Disorder](#) by Rebecca Branstetter, PhD (Ch. 8)“With the strategies and advice in this guide, you and your child will build sustainable bonds, develop positive behaviors, and improve executive functioning skills for life.” – Amazon

[The Everything Parent's Guide to Children with Executive Functioning Disorder: Strategies to help your child achieve the time-management skills, ... needed to succeed in school and life](#) by Rebecca Branstetter, PhD. (Ch. 9) “The vital skills children need to achieve their full potential!” – Amazon

[The Learning Brain: Memory and Brain Development in Children](#) by Torkel Klingberg, MD, PhD 1(Ch. 1) “In The Learning Brain, Torkel Klingberg urges us to use the insights of neuroscience to improve the education of our children.”- Amazon

[Train Your Brain for Success: A Teenager's Guide to Executive Functions](#) by Randy Kulman, Ph.D. (Ch. 9) “ Beginning with a test to determine executive-functioning strengths and weaknesses, the book then explores in detail eight distinct sets of skills, including planning, organization, focus, time management, self-control, , memory, and self-awareness.”- Amazon