



Study subjects

Carolyn Gibb, owner and founder of The Whitney Center in Richmond Indiana, a tutoring center that specializes in reading remediation, identified two of her most challenged students as subjects for her study. The primary reason these students were chosen was their slow processing speed. Prior to using BrainWare Safari, both students had done well in The Whitney Center’s reading program, which addresses auditory processing problems as well as providing some work in processing speed, spatial relations, and laterality. However, processing speed was still an issue for both students, and the outlook for further progress seemed limited. It was hoped that using BrainWare Safari would enable both students to improve their processing speed and allow them to progress further with their other reading remediation activities more quickly.

Both students were pre- and post-tested with selected subtests of the Woodcock-Johnson® III Cognitive Battery. They used BrainWare Safari at home over a 16-week time period. There was a three-week hiatus in their use in the middle of the 16 weeks. The names of the students have been changed to protect their privacy.

Player 1: “Andy”

- Chronological age at beginning of the study: 12 years 4 months
- Average cognitive age on the WJIII tests at the beginning: 7 years 5 months
- Overall improvement in cognitive age: 2 years 2 months
- Average cognitive age on the WJIII tests at post-test: 9 years 7 months
- BrainWare Safari progress: 58 levels
- Exercises time: 11 hours 19 minutes

Andy is receiving help from The Whitney Center because he has learning challenges and has been performing significantly below age expectations. He made good progress in The Whitney Center’s reading program, but additional cognitive development was believed to be key to his continued ability to make progress in the program. It was hoped that the high interest of the program and the time limit component in many of the exercises would act as a stimulant, revving him up beyond his usual slow and steady pace

	Pre-Test Cognitive Age years.months	Post- Test Cognitive Age years.months	Post-Test - PreTest	
			years	months
Visual Auditory Learning	6.7	6.10	0	3
Spatial Relations	8.9	8.9	0	0
Concept Formation	9.6	21	11	6
Visual Matching	6.1	7.1	1	0
Numbers Reversed	6.1	7.6	1	5
Auditory Working Memory.	9.3	8.2	-1	-1
Decision Speed	5.7	7.6	1	11

Andy started off significantly below his chronological age on each of the WJIII tests administered. He showed some improvement over the 16 weeks in all areas but Auditory Working Memory, with the most significant improvement in Concept Formation. Andy’s mom reports that he is paying better attention to directions now and he can work at things for longer without giving up or getting frustrated. She also



reports that he has loved working on BrainWare Safari and could hardly be pulled away from the computer to do homework or to go to bed. She is thrilled with the results she has seen and feels that it has helped Andy come closer to reaching his true potential.

The Whitney Center is also pleased with his progress and expects further improvement with more work in the program and other therapies.

Player 2: “Mike”

Chronological age at beginning of the study: 9 years 11 months

Average cognitive age on the WJIII tests at the beginning: 9 years 0 months

Overall improvement in cognitive age: 5 years 4 month

Average cognitive age on the WJIII tests at post-test: 14 years 4 months

BrainWare Safari progress: 111 levels

Exercise time: 5 hours 55 minutes

	Pre-Test Cognitive Age years.months	Post- Test Cognitive Age years.months	Post-Test - PreTest	
			years	months
Visual Auditory Learning	9.4	13.7	4	3
Spatial Relations	7.4	9.1	1	9
Concept Formation	7.6	17.6	10	0
Visual Matching	9.0	11.5	2	5
Numbers Reversed	10.7	19	8	5
Auditory Working Memory.	8.6	14.4	5	10
Decision Speed	10.9	15.2	4	5

Prior to using BrainWare Safari, Mike had a tendency to respond very slowly in answering questions to be sure he was right. He worked accurately but slowly. This slowness has affected his learning rate and slowed his progress in classes. The hope was that the high interest and time components of BrainWare Safari would help Mike overcome his overly cautious approach.

Mike showed significant improvement on all of the WJII tests following his use of BrainWare Safari. His mother reports that BrainWare Safari helped him to become a better decision maker and to begin working at a much more reasonable pace. His mother also reports that he is completing his school work both in class and at home much more quickly and confidently. She concluded that independent practice on cognitive skills without the pressure of being observed was good for him. She also observed that he loved working on BrainWare Safari. She is thrilled with the results she has seen and feels that it has helped him come closer to reaching his potential.

Both students plan to continue using BrainWare Safari at home even after they quit going to The Whitney Center.