



E.M. Burton



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# THE CrossFit JOURNAL

## THE CROSSFIT SAT-PREP PROGRAM

*CrossFit Founder and CEO Greg Glassman describes a pilot program that combines CrossFit training with education—a perfect fit with CrossFit's mission to change lives.*

Greg Glassman as told to Mike Warkentin

CrossFit has been in the business of improving athletic proficiency for a long time.

We've got a physiological answer to the question of fitness, and it's constantly varied functional movement performed at high intensity. But in net what we do is we make people better, and that's the more important part.

Curiously, "better" is really fuzzy language—but you get to decide for yourself and measure for yourself what "better" is.

If you would come into my box on Day 1, I'd tell you to go off in a corner and write down five things that would make you a better human being. Forget CrossFit. Just write down five things that you wish were true of you. Make them subjective or objective, something you can measure or not, and then put the list away. I'd want you to work out with us three to five times a week for six months, and we'd then review that list and see if we're closer or further from the target. I

If better involves academic success, getting into the right schools, and getting the right job—and that is indeed a definition of "better" for many—I think in our gyms we can improve cognitive function by just about any standard or accepted measure. We can do it with children, and

we're going to start by improving SAT scores. We can make kids smarter and improve their thinking processes, logic, vocabularies. We'll give them better tools to process and understand. The CrossFit SAT-prep program is going to do all this.

For long periods of time, I tutored training clients and some of their kids to tremendous net effect. I also learned early that the emotional and character components that led to significant training effect—success in athletes, success in training—were also carried over perfectly to academic success. It was after finding success with gymnastics, for instance, that I found success with mathematics. Not the other way around.

Mind-body dualism is a myth. I don't want to train like there's some sharp division between what happens from the collarbones up and the rest of the body. Brain function is part of the body. I've long thought that our training was a metaphor for boatloads of life lessons and patterns for success. It's time to tie already know what the answer would be. all of that together with the SAT-prep project.

CrossFit has a number of gyms that are currently playing with the SAT-prep concept with between three and 25 kids or so, and we're already seeing some data. It's just what you would think.





Every SAT tutor knows you can improve SAT scores. Guess what? We are. To see if this becomes something that the affiliate can fuse into his culture or her culture, and the box's culture, is the remaining question, and I don't see how you can miss.

The affiliate now has a wonderful opportunity. What a great thing it is to be able to tell a parent, "I'm going to take care of your kid's physical and mental fitness. Ask me how." That's a sign to put on the wall.

It used to be the most important thing I could do was unlock the door in the morning and stand there with somebody and teach him how to squat. We are in a position now to serve those affiliates that are unlocking the door every morning, and they don't need me standing over their shoulder giving them pointers on squatting. But if I could go back to that original little CrossFit gym in Santa Cruz and unlock the door, I'll tell you right now what I would do next: I would take those chairs we were using for seminars and I'd hold SAT-prep classes. I'd teach math to people who are afraid of math, and I'd be doing ev-

erything I could to improve the cognitive processes of my friends. And we'd have fun with it, too.

I've got these gyms that sit empty at least for a good portion of the night and a good chunk of the weekend. The whiteboards are already there, and we need 20 \$5 plastic stacking chairs. And I need an instructor, someone to raise a hand and say, "I'm a teacher." And suddenly all of us are in a completely different place.

In Kenya, we're building schools and bringing fresh water, and I don't think it's lost on anyone that there will eventually be gyms at each of these schools. On that side of the world, we've got schools that are going to become gyms, and on the other side of the world we've got gyms that are going to become schools. You know the old adage about teaching someone to fish rather than feeding him? This is clearly a case of teaching someone how to fish. I don't think there's any member of our community more deserving of a helping hand than these student athletes.

And we're going to help them.

#### Above-the-Neck FitNess By Hilary Achauer

"I hate math. I'm horrible at it." Kelsey, a tall, 16-year-old high-school girl from Murietta, Calif., had made up her mind about math.

When her friend Morgan told her about a 12-week program that combined CrossFit instruction with SAT-prep classes, Kelsey figured she didn't have anything to lose. She needed help with the math portion of the SAT, and the course was free. Morgan's mom worked out at CrossFit by Overload, the box offering the class. Other than cheerlead-ing, Kelsey didn't have a particularly athletic background, but Morgan told her she'd have fun. This is how Kelsey, Morgan and five other high-school girls found themselves at CrossFit by Overload's 6 p.m. class, nervously facing a warehouse full of barbells, rings, pull-up bars and other unfamiliar equipment. "When they started, they didn't want to get uncomfortable," said Paula Gravatt, one of the owners of CrossFit by Overload and the person in charge of the program.

"In the beginning, all they wanted to do was sit-ups," said Dustin Marshman, who taught both the CrossFit and SAT portions of the program. "They had no experience with a barbell, and none of them could do even one pull-up."

It's important to be physically strong, but equally important is what Coach Glassman likes to call "above-the-neck fitness."

The SAT-prep program, the brainchild of CrossFit founder and CEO Greg Glassman, combined SAT courses with CrossFit. The program consisted of three days of CrossFit training and two days of SAT tutoring, with CrossFit Endurance homework on the weekend. The classes





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were free to the students, and their attendance was entirely voluntary. So what does CrossFit have to do with SAT scores? How were deadlifts and push-ups going to help Kelsey get better at math?

The answer is complicated and goes back to one of Glassman's goals for CrossFit. It's important to be physically strong, but equally important is what Glassman likes to call "above-the-neck fitness."

#### Fitness and the Brain

CrossFit is not the first to explore the connection between exercise and

the brain. Others have already done so, and the connection appears to be real. In their 2008 book *Spark: The Revolutionary New Science of Exercise and the Brain*, John J. Ratey and Eric Hagerman report on a school in Naperville, Ill., where a revolutionary new P.E. program resulted in Naperville students finishing first in the world in science in the international standards test called Trends in International Math and Science Study (TIMSS). That's ahead of Singapore, Korea, Taiwan, Hong Kong and Japan. The authors write about a FitnessGram test in 2001 that found fit kids scored twice as well on academic tests as

their unfit peers. And one school that increased P.E. from one class a week to 45 minutes a day saw violent incidents decrease from 228 to 95 for the year.

Coach Glassman believes that CrossFit not only brings improved fitness but also creates improved people.

Glassman believes that CrossFit not only brings improved fitness but also creates improved people who are fit, smart, and operate with leadership and integrity. CrossFit is not just a fitness program but a lifestyle program, and his goal is to improve people's lives in a variety of ways. Glassman chose to focus on an SAT program because a good SAT score can be the difference between getting a scholarship and facing years of studentloan debt. It can be the difference between a satisfying, high-paying position or a go-nowhere, minimum-wage job.

As Ratey and Hagerman wrote in *Spark*

As Ratey and Hagerman wrote in *Spark*, "Exercise provides an unparalleled stimulus, creating an environment in which the brain is ready, willing and able." The administrators in Naperville were so impressed by the effect of exercise on academics that "guidance counselors (began) suggesting that all students schedule their hardest subjects immediately after gym, to capitalize on the beneficial effects of exercise."

#### Tricked into Teaching

How Marshman found himself in a CrossFit box standing in front of seven 15-year-old girls is another story. This father of two who works as a civil engineer is a former Navy SEAL who also runs an OSHA safety school and is a trainer at CrossFit by Overload. When asked how he ended up teaching the SAT course, he laughed and said, "Paula tricked me!"

One night, after a CrossFit class, Marshman saw a parent struggling to help his child with his junior-high math homework. Marshman stepped in to help, someone snapped a picture, and before Marshman knew it, he had six days to prepare the 12-week SAT-prep program

Marshman used Kaplan SAT 2012: Strategies, Practice, and Review and The Princeton Review's Cracking the SAT 2012 as references and came up with a plan. Marshman and the other instructors gave the students a CrossFit test and a sample SAT test at the beginning of the program. The CrossFit test consisted of a 1RM deadlift and then a timed workout that included a 400-meter run, 40 air squats, 30 sit-ups, 20 push-ups and 10 pull-ups (the students used either a green or blue band depending on their strength).

If teaching 15- and 16-year-old girls CrossFit was a challenge, trying to get them to pay attention to algebra at 7 p.m. on a Thursday was almost impossible.

"Teenage girls always have somewhere else to be," Marshman said with a laugh. "My tactic was to run this like a college class and give them respect. I did get respect from them, but I had to engage them constantly."

Marshman noticed that Kelsey, the girl who struggled with math, would have to look at a friend's paper in order to figure out how to even start the math problem. "I told her, Just start doing math," Marshman said. "It will lead you somewhere. Maybe you don't go down the right path when you start, but somewhere along the way it will lead you to the right trail."

That's a little like CrossFit. Fran doesn't do itself. You just have to pick up the barbell and start doing thrusters.

#### Meanwhile In New Jersey

At the same time Marshman and Gravatt were running their program in California, Karianne Dickson was running a similar experiment out of Guerrilla Fitness in Morristown, N.J. Just like the

Overload project, Glassman had asked Dickson to hold a free 12-week program that combined CrossFit instruction with SAT prep.

Dickson was able to find tutors— a husband-and-wife team—who run a private SAT-tutoring business. The class included six kids and consisted of semiweekly sessions that combined an hour of CrossFit instruction with an hour of SAT prep. The kids who participated were all somehow connected with Cross-Fit—either their parents were members or they were friends with someone who was a member.

Dickson and her team tried to reach out to the public schools to cast a wider net with this free program, but their proposal met with suspicion.

"The impression we got was that the superintendent thought this was too good to be true," Dickson said. "We weren't a known name, like (test-prep company) Kaplan, so they didn't want to take a risk and send students to us. Our hope is that with this pilot program we can go back and show the kids' progress and reach out to the community."

"I have been able to learn more in a few months' time than I would have been able to without the CrossFit component."

—Gabrielle



Michael Doyle



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“The SAT program has worked in great tandem with the (CrossFit) classes,” said Gabrielle, a student who participated in the Guerilla Fitness program. “Post-workout, with high endorphin levels, I have been able to learn more in a few months’ time than I think I would have been able to without the CrossFit component. The mental toughness developed in the gym

has played a vital role in my improved SAT scores, allowing me to push longer and harder through the grueling test.” The high-school students are not the only ones who benefitted from this program. The adult members would walk into the gym after one of the SAT classes, and instead of WODs and PRs, they’d see math formulas on the board.

“People involved in CrossFit talk a lot about our community involvement, but here the members were seeing it firsthand. They weren’t surprised to see us reaching out,” Dickson said. “They feel that this is part of what CrossFit is about.”

The adults were also impressed by the dedication of these young students, especially because most adults are happy to be finished with studying for the SATs.

“I heard a lot of them say, ‘Taking an SAT course is the last thing I would want to do after a WOD!’” Dickson said with a laugh.

### THE RESULTS

Marshman carefully tracked his students’ progress with both CrossFit and the SAT. For the SAT, which he tested three times over the 12-week course, Marshman saw a linear increase in the class average in the math section of the test. The students’ scores increased by 37.9 percent overall. The overall increase in the critical reading portion of the SAT was 21.4 percent.

On the CrossFit side of things, the average deadlift increased by 24 percent, while the average result of the timed workout was 23.9 percent faster. In his written summary of the course, Marshman wrote, “All of the students increased their power output during the baseline test. All but one student increased their deadlift scores.”

Over on the other side of the country, the students at Guerilla Fitness did Helen and Jackie at the beginning and end of the program, as well as the CrossFit Total. Gabrielle improved her CrossFit Total from 265 to 390, adding 60 lb. to her back squat. She improved her Helen time by more than 2 minutes and switched from a green band to a blue band for her pull-ups. On Jackie, Gabrielle shaved 50 seconds off her time.

The New Jersey group improved their average math scores by 100 to 150 points, and their critical reading scores increased by 190 points. What’s more, the SAT tutors noted that all the students quickened their pace in the critical reading and writing sections, which will help them when they take the SAT in a pressure-filled real-world setting.

### YOU CAN DO IT, MOM!

I visited CrossFit by Overload after the SAT program ended to meet with Marshman and Gravatt and interview

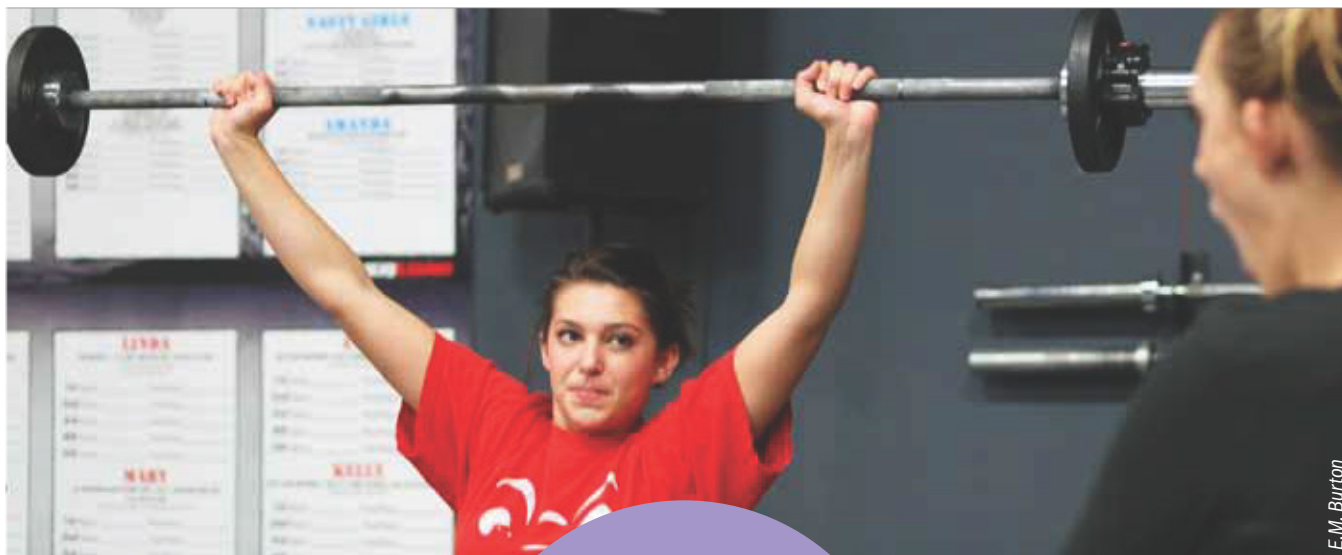


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two of the students who participated in the program. I talked with Gravatt while I watched Kelsey and Morgan go through a workout. Morgan was there with her mom, Maria, and they stood with their arms around each other before the workout. Mother and daughter suffered through the Hero WOD Brenton, a tough combination of bear crawls, standing broad jumps and burpees.

When Maria faltered toward the end, Morgan yelled out, "C'mon, mom, you can do it!"

After they had a chance to catch their breath, I chatted with Kelsey and Morgan about their experience in the SAT-prep program.

"We were welcomed by everybody on the first day," Kelsey said. "We got constant encouragement. And we learned new strategies in the SAT class, like how to break the test up into chunks and look for key words. And if we gave a wrong answer, Dustin would make us do burpees!"

In a warehouse filled with pull-up bars and barbells, Kelsey found someone who made math less intimidating, who made it seem possible.

"None of us did well on the PSAT (Preliminary SAT)," Morgan said. "In this class, we improved our lifting form, got in shape and learned at the same time." "I loved working together with my teammates during the WOD," Kelsey said. "I learned new (test-taking) strategies. Overall, this was a good experience. I would recommend it to anyone."

She continued: "The SAT tutoring helped with my other classes. Dustin tutored us in Algebra 2."

Just then, Marshman showed up. He greeted the girls and asked Kelsey how she did on her algebra test. Kelsey got a huge smile on her face and said proudly, "I got a B!"

Marshman beamed and gave her a high five. "That's great!" he said. In a warehouse filled with pull-up bars and barbells, Kelsey found someone who made math less intimidating, who made it seem possible. This same girl increased her deadlift weight by 48 percent and improved her time for the run/sit-ups/push-ups/pull-ups workout by 23 percent.

That sounds a lot like Coach Glassman's definition of fitness above and below the neck.

#### A crossFit bribe

Dickson told me that a course like this has a ripple effect beyond the impact on the high-school students. Once members of a CrossFit gym see this kind

of outreach and see how CrossFit can affect every aspect of life, the wheels start turning. How else can CrossFit change lives? What else can they do to improve their community? These are the types of questions Glassman is hoping people will start asking themselves.

CrossFit then becomes something more. It's not just, "How can I get a PR in my clean and jerk?" but "How can I make my community, my part of the world, a better place?"

"CrossFit was the glue that connected teens with potentially higher SAT scores."

—Dustin Marshman

Toward the end of the course, Marshman, the teacher of the California group, asked the girls what they thought of the program. The SAT portion helped their SAT scores and their grades, but they were most enthusiastic about the CrossFit workouts.

"They told me they loved the Cross-Fit part. They said they are at school all day," Marshman said. "They are tired of studying. The reason they kept coming was to work out."

He continued: "One of the best parts of the program was watching the students hit a point where they realized CrossFit was for them. The biggest thing I saw CrossFit do for the students was trigger their competitive nature. They would compete against each other in a WOD, and then they took that fire and brought it with them into class. They

were easily taught on those days." Gravatt also saw an unexpected benefit of the SAT course.

"This course impacted things they didn't think about," she said. "It improved their regular test taking at school."

"It seemed insignificant to me at the time, but in retrospect, CrossFit was the glue that connected teens with potentially higher SAT scores," Marshman said.

He continued: "We can't prove from our data that CrossFit increases learning ability; however, we can say that without CrossFit the students would have never completed the course. Their love of Cross-Fit helped them stick with the program."

"Parents bribe their kids with everything from money to candy to video games to get them to study hard. We offered a healthy alternative, and they took the bait."

And even if the children would rather deadlift than study at times, it's certain they'll appreciate the program all the more when they're receiving acceptance letters from all the right schools.

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For more info on CrossFit's SAT-prep program, contact Laura Bradrick at [Laura@CrossFit.com](mailto:Laura@CrossFit.com) or 1-605-888-0934.



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