Here’s a math problem for you…… How do you teach a student Algebra if they can’t multiply, work with fractions and don’t understand how to calculate with negative numbers?? Good luck with that one. Thousands of teachers throughout the USA are confronted with this task every day of every school year.

Schools (K-12 and colleges) have struggled to solve this problem for decades with little success.

So, think of math as a sequence of learned skills A through Z.

Learning skill C depends on whether you mastered skills A and B. If you only learned half of skills A and B then learning skill C will be difficult or as often occurs, impossible.

Solution: Stick with Skills A and B till you get IT! Another secret, Each individual can ‘Get” skills A and B when given enough TIME**!**

Newsflash!! Schools don’t teach individuals. They teach groups of students, 20 to 40 at a time. Teachers have tight curriculums to follow that must be completed in a specific amount of time. Despite the needs of the individual, time and the curriculum march forward leaving many behind.

Solution? Build your math skills one brick at a time with Number DNA.

Number DNA is a set of 16 web based math apps that are the 16 bricks that have to be securely mastered in order to take on and succeed at Algebra and beyond. Number DNA is a flexible package of web based math apps.

You can practice Number DNA anywhere, on your phone, iPad or laptop.

After taking a one hour pretest you receive your personalized report that acts as your game plan. It tells you which foundation bricks that you already have securely in place and which ones that you need to work on. Number DNA is designed to be self paced and self directed with tons of support both online or via downloadable hardcopy practice sets.

(insert something describing the number DNA connection?)

Business could use Number DNA (and Algebra DNA?) as training modules to improve the numeracy skills of all workers. Badging completely through all 16 web based apps (in each) could become a basis for evaluation and a modest bonus. It might also be a springboard to additional training opportunities.

Community Colleges could use Number DNA and Algebra DNA to help the millions of students that enroll each year and require 1 to 3 remedial (not for college credit) math classes.

Middle schools and High Schools could use Number DNA as a self paced remediation package. The pre-test would diagnose each individual students’ strengths and weaknesses and thereby provide an intervention plan tailored to each student.

Additionally, Number DNA is designed to be used in conjunction with a textbook

Foundations For Algebra. This text contains detailed discussions that start with whole number factors and divisibility then continues through fractions, percent, integers and solving basic equation using positive anumbers, negative numbers and fractions.

The issue of Social Justice.

**The Problem:** In my experience teaching remedial math at the high school, university and community college levels, students fail to progress beyond remedial math because they lack the basic number skills necessary for success.

Many students referred to remedial math courses don’t know multiplication and division facts. Consequently they can’t find least common multiples and greatest common divisors which means they get blown away by fractions and fractions are the first gate keeper before they get to the more famous gate keeper, Algebra!!

**Conclusion:** The current approach to remediating math skills fails too many students. What is needed is a new approach!!

**The solution** is to rebuild math foundations brick by brick. To make sure that each brick is solidly in place and then move on to the next brick. I have devised a curriculum based on mastery learning that can help students build a solid foundation of numerical skills.

**What I need** is a package of computer based math applications that use motivational gaming where students can practice and master basic numeracy skills

**What exists now** are relatively simple math apps few of which are designed to address the learning styles of the older college student.

**Imagine the positive impact that a brilliant package of math apps could have on helping students smash through the learning barriers that stand in the way of realizing their dreams!**

so·cial jus·tice

*noun*

noun: **social justice**

1. justice in terms of the distribution of wealth, opportunities, and privileges within a society.

# [Education Is Social Justice](https://blog.ed.gov/2011/08/education-is-social-justice/)

“I believe that education is the civil rights issue of our generation. And if you care about promoting opportunity and reducing inequality, the classroom is the place to start. Great teaching is about so much more than education; it is a daily fight for social justice.”

~ Secretary Arne Duncan, October 9, 2009

**Thought: Instead of reaching down and pulling from the top, lets get down off of our high horse and start pushing up from the bottom.**