

## **What if there are not enough seats?**

*This flyer, put out by Students of Adult Literacy United (SALU), has been used by learners advocating for adult education. Consider the point it is making – that there are not enough adult education classes to meet the current need – and discuss the effect that this might have on persistence.*

### **Figures Don't Lie But Liars Sure Can Figure**

## *The Statistics of Literacy*

**The U.S. Department of Education recently announced the results of its 2003 National Assessment of Adult Literacy (NAAL) <<http://nces.ed.gov>>**

**Nationally, 13% are below basic level in Prose (Reading) Literacy.  
That is 30 million people.**

**29% are basic level in Prose Literacy.  
That is a total of 63 million people.**

**In Document and Quantitative Literacy, the numbers are not better!  
In Document Literacy, 14% are below basic and 22% are basic.  
In Quantitative Literacy, 22% are below basic and 22% are basic.**

**Between 90 and 100 million people in the United States  
need literacy services and classes!**

**In New York City, using the same percentages, we estimate that 3 million  
New Yorkers could benefit from classes, but there are only seats for a  
maximum of 60,000 learners. New York City may even have a larger number  
of people needing services because of the large immigrant population.**

**It's time we started talking about real numbers. The problem of illiteracy  
and deficient literacy is immense and needs to be dealt with.  
It affects the whole of our society.  
Facing reality would be a good start!**

# Statistics of Literacy: Exploring the Math

by Tricia Donovan

One way to engage with the data in *The Statistics of Literacy* (see the previous page) is to explore the math embedded in the flyer. Different class levels will determine the entry points and end points for investigation. Below we list a few suggestions and problems that might start you thinking.

- 1.** If 13% of our country's population (2003)\* equals 30 million people, can 29% equal 63 million? Yes? No? How do you know?
- 2.** These tests measure adult literacy. Do you think the figures given for Prose Literacy (reading) are accurate? Why? Why not? Visit the U.S. Census bureau's web site <[www.census.gov](http://www.census.gov)> to see if you can support your opinion using census data.
- 3.** Compare the sets of test results reported — Prose (reading), Document (graphs, charts, and forms), and Quantitative (math) — using a bar graph. You may use a double bar graph to show both 'at' and 'below' basic figures for each test. Try using different percent increments on your y-axis; how does that affect the data picture you present? For what different purposes might you use small increments or large increments?
- 4.** If you use a single bar graph by combining 'at' and 'below' basic percent figures, how can you show the percent of people who scored 'above' basic levels?
- 5.** They call "the problem of illiteracy and deficient literacy...immense." Do you agree or disagree? Use figures to support your position.

- 6.** Explain how you think the authors of the flyer reached the conclusion that "between 90 and 100 million people in the United States need literacy services and classes."

- 7.** If you can find 10% and 1% of a number, you can find *any* percent of a number by using multiples of ten and one (for example, 22% equals 10% doubled plus 1% doubled). The U.S. population today (2007) is approximately 300 million. If these same tests were given today as in 2003 and the percent results were the same, how many *adult* citizens would score at or below basic levels on each test? What information do you need to answer the question?

- 8.** Make your own flyer using local data (or regional local data) instead of New York City data. What might you do with your flyer?



\* 2003 population estimates can be found at <[www.census.gov](http://www.census.gov)>.

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