

Our Path to First Choice Update No. 35

Everyone,

Here is Path Update No. 35.

Our Path Topic

In this Path Update let's look at data as part of education. Please keep in mind that size of state and number of students must be considered. This might be interesting.

Pennsylvania (PA) has 3,062 schools. The US average is 1,966 per state. 1,717,414 students, and the US average per state is 986,804. PA has 120,892 teachers, and the US average is 61,794. Pupil to teacher ratio in PA is 14.21 and US average is 15.97. There are 5,927,075 male students and 6,352,000 girls in PA.

PA spends over \$27 million on elementary and secondary education per year. The US state average of just a little more than \$12 million. In the last three school years, according *The PublicSource—2017*, 12 of the state's 14 cyber charter schools spent more than \$21 million combined in taxpayer dollars promoting their schools. The Commonwealth Charter Academy spent the most of the cyber charters on advertising; it spent \$3.2 million in 2015-16 and \$4.4 million in 2016-17. This school is considered a public school by PA law. The Pittsburgh Public Schools spent \$346,000 on commercial and government access TV productions aimed at what the district called increasing pride in the district.

The NAEP test scores show PA above the US average for 4th and 8th grades in math, reading, and writing. Based on data from the Current Population Survey, the status dropout rate decreased from 10.9 percent in 2000 to 5.9 percent in 2015. Between 2000 and 2015, the male status dropout rate declined from 12.0 to 6.3 percent, and the female status dropout rate declined from 9.9 percent to 5.4 percent. Between 2000 – 2016, educational attainment rates among 25- to 29-year olds increased. During this time, the percentage who had received at least a high school diploma or its equivalent increased from 88 to 92 percent, the percentage with an associate's or higher degree increased from 38 to 46 percent, the percentage with a bachelor's or higher degree increased from 29 to 36 percent, and the percentage with a master's or higher degree increased from 5 to 9 percent. According to a 2012 National Center for Statistics, student performance today is no worse than students 40 years ago.

An area schools are dealing with today that is more prevalently discussed than any other time in recent history is bullying. According to the National Center for Education Statistics, in 2015, about 21 percent of students ages 12-18 reported being bullied at school during the school year. Of student ages 12-18, about 13 percent reported that they were made fun of, called names, or insulted; 12 percent reported being the subject of rumors; 5 percent reported that they were pushed, shoved, tripped, or spit on; and 5 percent reported being excluded from activities on purpose. Additionally, 4 percent of students reported being threatened with harm, 3 percent reported that others tried to make them do things they did not want to do, and 2 percent reported that their property was destroyed by others on purpose.

Public elementary and secondary school enrollment rose from 49.4 million in 2009 to 50.3 million in 2014, an increase of 2 percent. However, enrollment in private elementary and secondary schools in

2015 (5.8 million) was 5 percent lower than in 2005 (6.1 million). In 2015, private school students made up 10.3 percent of all elementary and secondary school students. For public schools, the number of pupils per teacher—the pupil/teacher ratio was 16.1 in 2014. The pupil/teacher ratio for private schools in comparison was 12.2 in 2014.

The Indicators of School Crime and Safety: 2016 report showed that from July 1, 2013 through June 30, 2014, there were a total of 48 student, staff, and other nonstudent school-associated violent deaths in the United States, which included 26 homicides, 20 suicides, 1 legal intervention death, and 1 undetermined violent death. The percentage of students in grades 9—12 who reported that illegal drugs were made available to them on school property decreased from 32 percent in 1995 to 22 percent in 2015. However, no measurable differences were found between the percentages in 1993 (the first year of data collection) and 2015 and between the percentages in 2013 and 2015.

Finally, some interesting Teacher profession trends. The average salary for public school teachers in 2015-16 was \$58,064 in current dollars. The average starting teacher salary in the US in 2013 was \$36,141. In constant (inflation-adjusted) dollars, the average salary for teachers was 1 percent lower in 2015-16 than in 1990-91. In 2011-12, some 76 percent of public school teachers were female, 443 percent were under age 40, and 56 percent had a master's or higher degree. Compared with public school teachers, a lower percentage of private school teachers had masters or higher degree (43 percent). Among public school teachers with 1—3 years of experience, 80 percent stayed in their base-year school, and 13 percent moved to another school, and 7 percent left teaching in 2012-13. 38 percent of public school teacher movers left one public school district to another public school district between 2011-12 and 2012-13.

According to a 2016 study out of the University of Lock Haven, by 2020, an estimated 300,000 new teachers will be needed per year, and by 2025, that number will increase to 316,000 annually in the United States. Unless major changes in teacher supply or a reduction in demand for additional teachers occur over the coming years, according to the study, annual teacher shortages could increase to as much as 112,000 teachers by 2018, and remain close to that level thereafter. Between 2009 and 2014, the most recent years of data available, teacher education enrollments dropped from 691,000 to 451,000, a 35% reduction. The southern part of the US has a particularly high turnover rate than other parts of the country. Only 5 percent of the students in a recent survey of those taking the ACT college entrance exam were interested in pursuing a career in education, a decrease of 29 percent between 2010 and 2014.

Review for You

- Why use data to make determinations or decision?

Events

- Celebration Day, May 25th. More details to come.

Piece of the Puzzle

- This week, congratulate nurses Torey Kauffman and Kai Shaffer for being nominated as the Pieces of the Puzzle this week. These ladies were tasked with completing over 400 vision screenings. These amazing professionals have managed to complete nearly 50 screenings a day without pulling students from academic classes. They are always positive, supportive, and do whatever it takes to get the task completed. When you see these ladies, congratulate them for being the Pieces of the Puzzle this week.

Review Answers

- Data provides us with quantifiable means to help us make decisions. As to our WASD Leadership Model, the first step is to determine the needs of the stakeholders. Looking at student, parent, staff and community data helps us know where things are at, and then we can start to see how things need to improve.

Final Thoughts

- *It is the mark of a truly intelligent person to be moved by statistics.*—George Bernard Shaw.
- *Statistics is the grammar of science.*—Karl Pearson.
- *Statistics are like a bikini. What they reveal is interesting. But what they hide is vital.*—Aaron Levenstein.
- *Statistics is the art of lying by means of figures.*—Wilhelm Stekel
- *To understand God's thoughts we must study statistics, for these are the measure of His purpose.*—Florence Nightingale.
- *There are two kinds of statistics, the kind you look up and the kind you make up.*—Rex Stout
- *If the statistics are boring, then you've got the wrong numbers.*—Edward R. Tufte
- *Statistics are like a drunk with a lamppost: used more for support than illumination.*—Winston Churchill
- *Statistics say that 1 in 4 people are insane, so take a look at your 3 best friends and if they are all ok, it's you!*—who knows?

Have a great rest of the week.

Tod