Education and the Internet

Education is the way that knowledge is spread to people and the formal institutions where people either teach or learn the information needed to be a functioning person in the world. This has long been a way for people to spread ideas and continue on values and beliefs. The ways in which people teach and learn is constantly changing, trying to find bigger and better ways to make people understand content to the best of their ability. A major factor for this is the internet and the learning tools made available uniquely through the use of technology. The more access students and teachers have to the internet in the classroom, the higher levels of education the students receive.

Although the internet has only been a part of mainstream society since the 1990’s, the world has been completely transformed because of it. Technology has completely taken over almost every sector of our lives, especially in developed countries. Education, banking, healthcare, government, and communication have completely shifted to the virtual space is only a few short decades. These things have allowed for the globalization of the world and have created the economy that we have today completely reliant on other countries from a production and consumption standpoint. The internet has made communication and teaching completely different allowing for the very fast spread of information. Many good and many bad things have stemmed from the invention of the internet.

While many think that the world is completely digitized, they often forget about the developing countries who cannot afford or even know about the different technologies that are
central to many of our lives. Typically, poorer countries have much less access to technology and the internet than those in more affluent countries. There also is a higher chance of people in these countries not being able to afford computers and the other tools needed to use them efficiently. The unequal distribution of wealth and resources in the world makes it seem as though some people are more deserving of things like the internet than others are.

To research this issue further I looked at a variety of different data sets. The one that stood out the most was the set with average learning outcomes by total education spending per capita. This data set is useful because it clearly lays out how much each country is spending on education and compares it to learning outcomes or test scores that the people being educated are taking. I also looked at the data set that graphed the percentage of schools with access to the internet for teaching and learning split into the three levels of education (primary, lower-secondary and upper-secondary).
The graph of learning outcomes and spending per capita on education has a $R^2$ value of only 0.323 but the line has a positive slope and some sort of correlation between education spending and scores on exams. When more money is spent on education from the government, the students have higher scores on tests for the most part. This makes sense because when teachers and students are provided with more resources they will have more access to things like technology and payment for teachers to have the willingness to work.

Countries that spend less on education likely do not have the resources to spend a lot on anything or do not value education in the way other countries do. Obviously this data set has outliers of countries who spend a lot and do not produce high learning outcomes and more who do not spend as much and have very high outcomes, these countries have very smart children or are very good at budgeting and managing donations and private institutions. The less money that these governments spend on education the less likely they are to have computers and other technologies that allow them to have access to the internet.

This graph of the share of schools with access to the internet for teaching is interesting and helpful because it shows the increase across the globe of the use of computers in the
classroom. It is obvious that the use of computers in the classroom is becoming more important to continue growing with this fast paced world. Without basic computer knowledge people are not going to be equal competitors in the job market. This knowledge is vital due to the computerization of everything.

So, some parts of the world, especially the developing countries in the world are facing an issue of education. In order to create a more equitable world, many argue that we must start from the bottom up. The bottom in this case is the education of young people so that they can help reform the world to be a better place for everyone. Without access to computers and technology in the classroom, these students are put at a disadvantage from as early as preschool and will not be able to solve the problems that need to be solved. We must all work together to find solutions to providing internet and computer access to teachers and students across the globe.

References:

Schools with Access to the Internet Dataset: https://ourworldindata.org/grapher/schools-with-access-to-internet
Average Learning Outcomes by Total Education Expenditure Per Capita Dataset: https://ourworldindata.org/grapher/average-learning-outcomes-by-total-education-expenditure-per-capita