Statistical clerks

Math Nerd vs. Social Butterfly: It turns out you need to be both

REQUIRES SOCIAL SKILLS Lawvers and judges Financial managers Social workers Vocational counsellors Economists Management analysts Registered Physicians Engineers Police Licensed practical Designers Computer scientists Dentists Accountants (Childcare workers Health technicians Nurses aides assistants Engineering and REQUIRES science technicians MATH SKILLS Truck drivers General office clerks Mathematicians Auto mechanics Food scientists Janitors Electricians Machinists | Industrial Accounting clerks machinery

Carpenters

Share of jobs grew

Exhibit 2: Since 1980, jobs requiring social skills have surged

Figure 1 shows different job titles on a 2x2 matrix comparing mathematical requirements and social skill requirements. The color of the dots signifies whether the number of that job positions has increased, fell, or approximately stayed the same since 1980.

Biological technicians

Share of jobs remained the same

Tool and die makers

Source: David Deming, Harvard (https://www.weforum.org/agenda/2016/09/jobs-of-future-and-skills-you-need/)

Demand for Jobs Should Influence Curricula

Machine operators

Welders

Share of jobs fell

Labourers

This simple chart shows the changing nature of jobs in the U.S. and therefore changing valued skills. This directly correlates to different types of education that will be necessary to create more employable youth. Perhaps this is a call to action on educators to increase engagement and refining of softer social skills like team work and empathy along with the mathematical increase we are already seeing. This chart also provides inspiration to get a job that is sustainable versus one that may disappear with future technological trends.

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Implications

Clearly, this plot becomes extremely insightful as we imagine the changing educational models in our digital era. As students continue to learn more material from online sources like the Stanford Online High School or Devry University, they may lose the interactions with other students that build interpersonal skills. Is the notion of team projects going to disappear when students are geographically isolated? Perhaps this will allow for a future of video conferencing but will this new technology change the way we interact and grow **in-person** social skills? Will we create a generation of extremely adept workers who have a lesser ability to lead teams, relate to others, and provide the human care that many need?

Furthermore, soft skills like the ability to share items and negotiate around conflict are increasingly necessary as mundane/repetitive jobs are being delegated to machines and nuanced/personal jobs to humans. The combination of social and mathematical skills seems to lead to the most ideal future. Learning only social skills can lead to lower paying jobs and learning only math skills can lead to unemployment with a lower demand for these skills alone. How can we strike a balance between these two sets of skills as out educational systems evolve online?