July 18, 2023

To: Interested Parties
Fr: Impact Research
Re: Americans See Need to Better Prepare Students for National Security Careers of the Future

Our new survey shows Americans believe preparing students for jobs of the future – including careers in STEM fields essential to national security – is critical. Most middle- and high-school students polled are interested in pursuing these jobs of the future, but many believe schools are not preparing them for these roles. And while teachers see job preparation as part of their responsibility, many question their ability to be successful.

Americans – especially teachers – see the potential of incorporating AI and ChatGPT into K-12 education and already think ChatGPT is helping students learn.

Key Findings

- **Most students are interested in STEM-related careers.** In total, six in 10 students (62%) say they'd consider a future career in at least one of the following:

  - Biotechnology (26%)
  - AI (25%)
  - Fintech (22%)
  - Quantum computing (16%)
  - 5G/6G (15%)
  - Semiconductors (11%)

  However, a third say their school is doing a bad job of preparing them for a future career in STEM (33%). Only 40% of students say their school offers advanced classes in *all* STEM subjects.

  Fifty-two percent (52%) of female students are interested in at least one of these national security-related careers, 20 points lower than the share of male students interested (72%).

- **Americans – including teachers – believe preparing students for careers in STEM is important to maintaining national security.** Americans think national

These findings are based on the results of a national survey of N=1000 K-12 teachers, N=1002 students ages 12-18, N=802 voters, and N=916 parents conducted by Impact Research June 23 – July 6, 2023. The 95% confidence interval is ± 3.1 percentage points for the teacher and student results, ± 3.5 pp for the voter results, and ± 3.2 pp for the parent results.

security is a priority (29% rank it in their top three issues) for leaders in Washington to address, on par with immigration (30%) and climate change (26%). After hearing about how other nations are successfully training young people for STEM-related careers, **more than nine in 10 Americans** (91%), including 95% of teachers say preparing U.S. students for these subjects is important, including two-thirds of both that say it's *very* important.

- **Americans think schools are doing a bad job of preparing students for the workplace and are divided on whether teachers are currently qualified to prepare students for jobs of the future.** Americans give K-12 schools a 37% positive to 61% negative rating for preparing students for the workplace and future careers. When told about federal funding intended to help create new jobs of the future, 59% of Americans say they don't think students are prepared for these careers. And Americans are just as likely to think K-12 teachers are not too or not at all qualified to prepare students for jobs in areas like AI, semiconductor, quantum computing, 5G/6G and fintech (47%) as they are to think they're qualified (47%).

  Nearly all teachers agree it is their job to prepare students for jobs of the future, yet four in 10 believe they are *not* preparing them for the above roles in the coming years (37%).

- **Teachers, students, voters, and parents know and view ChatGPT favorably.** In addition to AI being one of the key national security-related fields students are most interested in, more than two-thirds of teachers (73%), students (67%), voters (80%), and parents (71%) say they are familiar with ChatGPT. Each group gives ChatGPT a net-positive favorable rating:

  o Parents: 61% favorable / 17% unfavorable
  o Teachers: 58% favorable / 24% unfavorable
  o Students: 54% favorable / 20% unfavorable
  o Voters: 43% favorable / 25% unfavorable

- **Teachers already use ChatGPT regularly to enrich learning, and usage is up from earlier this year.** Fully 63% of teachers say they've used ChatGPT for their job, which is up 13 points from when asked in February (50%). Four in 10 teachers report using it *at least once a week* (40%)*.*

  An overwhelming majority of teachers who've used ChatGPT say it positively impacted their classes (84%). Teachers are incredibly optimistic about ChatGPT: 61% say it will have legitimate educational uses that we cannot ignore, versus just 23% who believe it will likely only be useful for students to cheat.

- **Voters and parents also see the potential for ChatGPT's impact in education – more so than students.** By double-digit margins, both voters and parents also say ChatGPT will have legitimate uses in education (47% among

voters, 49% among parents), versus being used mostly as a tool for cheating (24% among voters, 32% among parents). Nearly two-thirds of parents think teachers and schools should allow the use of ChatGPT for schoolwork (64%), including 28% who say they should *encourage* its use.

While the number of students who report having ever used ChatGPT for school (42%) is up from February (33%), usage lags that of teachers (63%). Despite the early adoption by educators, 30% of students think ChatGPT has had no impact at all on their learning, in addition to 21% who are outright unsure.