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# Two-thirds of Engineers Entered the Career to Change People's Lives, According to New KLA Research

**Report Highlights Female Engineers are Passionate About Engineering Despite Barriers to Entering the Field;**

**KLA Corporation's New Engineering Inspiration Report Showcases Motivators, Passions and Challenges to Entering the Engineering Field**

MILPITAS, Calif., Oct. 26, 2021 /PRNewswire/ --[KLA Corporation](#) (NASDAQ: KLAC) today announced the [KLA Engineering Inspiration Report](#), a new multi-regional research that shows engineers are extremely passionate about possibilities that the field provides. The inaugural report notes roughly two-thirds (65%) of engineers and students indicate they entered the field to create something that might change people's lives.

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Overall, nearly two-thirds of engineers (64%) indicate they are just as, if not more, passionate than they were when they entered the field. While there is no statistical difference in those numbers (women: 61% and men: 64%), women are faced with additional challenges such as the lack of family engineering role models and a later introduction to the engineering career path than their male counterparts. Further, 59% of female engineers say they were challenged in that STEM was not considered an appropriate field for women when they were on the path to engineering. The data speaks to the perseverance of women in engineering to continue in a career with a high level of passion despite the barriers they faced along the way.

The KLA Engineering Inspiration Report reveals the motivations, inspirations and major challenges on the path to becoming an engineer. As the gap between the supply and demand of engineering talent across industry sectors has increased, KLA found it critical to better understand the unique needs of those who choose the career path to encourage a more diverse set of people to explore the engineering profession. To gain insights, KLA commissioned the survey of both students and engineers in five regions which include the U.S., the U.K., China, Taiwan and Israel to assess their feelings, the drivers behind success and the barriers to entry that we need to work together to overcome.

On the launch of the report, KLA's Chief Executive Officer and President Rick Wallace commented, "The insights gleaned from the Engineering Inspiration Report offer the opportunity for us to customize the KLA workplace experience, not only for our existing engineers but also those of the next generation. Part of our vision at KLA is 'the future is ours to create,' and engineers are critical to making that a reality and bringing cutting-edge

innovations to life. It is up to us to ensure that we are creating an inspirational, stimulating and inclusive environment for them to work."

### **Engineers want to make an impact**

When first introduced to engineering, around two-thirds of engineers and students were highly motivated by the ability to solve problems (68%), the chance to create something that might change people's lives (65%) and the opportunity to bring the future to today (65%). In addition, half (50%) of engineers and students indicate they have been inspired by sustainability issues, such as climate change, overpopulation and major natural disasters, and 39% by social concerns such as social disparities and disparities of resources.

In Taiwan, seven in 10 (70%) engineers and students say the digital revolution, such as the emergence and adoption of AI, machine learning and other technologies, drew them to the field—which is over 20 percentage points higher than the multi-regional average (49%).

When looking for careers in engineering, students and engineers similarly indicate that salary is important but so are the opportunities for career growth and other life benefits such as sabbaticals, new parent programs, financial planning support and time off to volunteer. Outside of work, engineers and students turn to music (29%), exercise (28%) and nature (28%) to draw inspiration for their day-to-day work—possibly further indicating the need for a package deal when choosing an employer.

### **Women on the engineering career path are determined and perseverant**

Women in engineering want change. More than half (54%) of female engineers and students say they were motivated by the chance to break the glass ceiling when first introduced to engineering.

One of the biggest challenges is when and how women are introduced to engineering as a career. Nearly half (44%) of all engineers and students indicate they were first introduced to the engineering field by family or friends. Yet, when looking by gender, only 9% of female students report a parent introduced them to the field (vs. 17% of male students), and only one-third (35%) of female students report they were motivated by the chance to follow in the footsteps of a parent or family member (vs. 50% of male students).

Further, when asked when they began considering engineering as a career path, male students are more likely to say high school, while female students indicate undergrad.

### **Engineering degrees can be costly and time consuming, yet may not be teaching all the right skills**

Across all regions, engineers cite common challenges to entering the field, with the stress of needing to achieve academic excellence, the time it takes to become an engineer and the cost of education as the top challenges. Though in some regions, like Israel and Taiwan, the challenges are more prevalent. When thinking about why more people do not chose engineering as a career path, half (50%) of students and engineers in Israel point to the stress of needing to achieve academic excellence as a barrier to pursuing the career (multi-regional average: 36%). More than half (56%) of students and engineers in Taiwan say the time it takes to become an engineer is a top reason why more people do not consider the

field (multi-regional average: 40%).

Beyond the education required, professional engineers indicate a gap between the skills they were taught in school and the skills required to be successful in their career. Engineers rank teamwork, time management and project management among the top skills required for success, yet more than half (52%, 63% and 60%, respectively) of students say those skills are not being taught in their current programs.

### **The passion is high and so are opportunities**

Almost all students and engineers indicate they are highly passionate about the chance to join the field and, in turn, would recommend their career to others. 86% of students say they are very passionate about the opportunity to become an engineer, and 82% of engineers say they would recommend becoming an engineer to someone they know.

These results are even higher in certain regions. For instance, 94% of U.K. students say they are very passionate about the opportunity to become an engineer, and nearly nine in 10 U.K. engineers (88%) and Chinese engineers (88%) say they would recommend becoming an engineer to someone they know.

### **Additional Resources**

For more details about the KLA Engineering Inspiration Report and to hear stories from KLA engineers about why they became an engineer, please visit [www.kla.com/EngineeringInspiration](http://www.kla.com/EngineeringInspiration).

### **Methodology**

In partnership with IPSOS, a global business and consumer research services organization, a survey was fielded from June 4 – July 29, 2021 in five regions (the United States, the United Kingdom, China, Taiwan and Israel) in their native language. The survey sample included 1,083 students and 2,278 engineers, using an online methodology with a varied sample per market and per audience.

### **About KLA**

KLA develops industry-leading equipment and services that enable innovation throughout the electronics industry. We provide advanced process control and process-enabling solutions for manufacturing wafers and reticles, integrated circuits, packaging, printed circuit boards and flat panel displays. In close collaboration with leading customers across the globe, our expert teams of physicists, engineers, data scientists and problem-solvers design solutions that move the world forward. Additional information may be found at [www.kla.com](http://www.kla.com) (KLAC-F).

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