Title of the session: Education for Gender Equality: a powerful tool for transformation

1 slide: I have a pretty unusual career path for Kazakhstan. I did my BS and MS in biotech and chemistry. I was working in research for 6 years and after an amazing experience at NASA Research Park I moved to the administrative part of the university and started working in the sphere of innovations. By doing this change I planned to unite my scientific knowledge and experience with practical innovative mechanisms. I clearly saw that managing innovations without understanding of technical knowledge was purposeless and ineffective. My change of specialization was logic development of my original interest to new and innovative ideas. However, when I took this decision, I met a huge confrontation from my colleagues. There are two reasons for this. Firstly, any change to a career is equal to a failure. Secondly, and most importantly, women are not viewed as great strategists and administrators.

2 slide: I often felt this inequality, even in science. That is why in 2017 together with my colleague we opened a mentorship program (scinet.kz) for children who want to pursue a path of a scientist. The mission of the project is to empower and promote the development of youth science in Kazakhstan.

3 slide: Now let’s look closer at statistics at women and girls in STEM.

In Kazakhstan, the number of women in science is approximately equal to the number of men (53%). Plus the number of women in science is growing. This may sound unexpected but this is actually explained by the low salary among scientists. Many women are willing to work for less and do not require more.

If we are talking girls choosing STEM in school or university, this number is even higher. However, of these, a small part continues to work in science or engineering. One of the main
reasons is that women constantly have to choose between family and career. How often is this question addressed to men? Being a scientist means mobility. The scientist needs experience in the laboratories of different countries to expand his horizons and establish cooperation. Without the support of a partner or family, a woman has to sacrifice her scientific career. It is fundamentally wrong to expect that a woman is responsible for has raising children. But that’s what we mean when we ask such questions as “How did you manage to combine career and a family” to successful women.

4 slide: We believe that we are so advanced, and there are still so many stereotypes to work on. However, I clearly saw how two particular initiatives changed this situation for the better.

The first positive factor is global initiatives. Programs Technovation and Techwomen are for girls and women in STEM and entrepreneurship. Such global initiatives put the right examples for the society, show that all the restrictions are only in the head. Particularly at Technovation I saw how the success of one IT girl inspired others. I remember how much skepticism there were towards the competition for schoolgirls in IT in the beginning and how this attitude changed when a team of schoolgirls from Kazakhstan won a grand prize among all other teams from the whole world at the World Pitch Summit, the final stage held in Silicon Valley. However, we must understand that global initiatives must be supported by local examples. Few dare to go to world platforms right away. Only after receiving local support, more and more girls and women will decide to participate in world competitions and share their achievements and knowledge with the world.

5 slide: The second great factor is mentorship. The idea of mentorship is pretty new to Kazakhstan. When I first came to the States in 2005, it already existed there for a long time, and I am extremely grateful for the mentors I had. The idea of mentorship has existed since ancient times. Remember the ancient teachers or masters and apprentices from the Middle Ages. In Kazakhstan the word "mentor" can be heard most often in the business sector, where a successful businessman helps a startup in development. However, I believe that it is in education that the topic of mentorship will have a tremendous effect. It is a pity that in our time, the main role models for young people are Instagram beauty accounts and bloggers-viners. I clearly understand that it is a world trend however, in Kazakhstan because of the absence of existing mentoring platforms it has become more dangerous and powerful. Being a transitional country we have lost our mutual understanding of moral and therefore, we need to create new ideas and principles.