

The unpopularity of natural sciences

Last 2023 year 176742 people applied to the institutions of higher education in Ukraine for a bachelor degree based on general secondary education – this data are provided by the State Examination Centre. As always, the top ten leaders were the following specialties: “Law”, “Computer sciences”, “Psychology”, “Philology”, “Management”, “Software engineering”, “Marketing”, “Secondary education”, “Cybersecurity and information protection”, “Economy”. Similar statistics are observed from year to year.

It becomes clear, that young people prefer humanitarian specialties and computer sciences. Such repetition testifies to the unpopularity on natural sciences. For example, last year 57,572 application were submitted for the specialty “Law”, 1,031 applications for the specialty “Chemistry” and only 925 for the “Physics and Astronomy”. Such figures are discouraging, because entire faculties are being closed due to lack of students.

What exactly makes the scales tilt towards the humanities sciences? According to the results of an anonymous survey, entrants consider the humanities to be more prestigious, simpler, and more understandable, in contrast to physics, where you constantly have to solve problems and conduct experiments. Some have even expressed the opinion that, there are no need in physics and chemistry in our time, because the future belongs to smartphones and computers. Of course, they did not take into account the fact, that those smartphones run on lithium-ion batteries, invented by chemists, or they charge them using alternating current, which discovered by a physicist. They forgot that their clothes are mostly a product of organic synthesis, and fertilizers are used to grow grain.

On the one hand, the small number of future specialists simplifies the professional path, reduces competition. On the other hand, it has a negative impact on enterprises, where there is a storage of technologists or laboratory assistants, which negatively affects the production process and makes it difficult to develop.

At the same time, the largest agitator for the choice is the teacher-specialist, who is not always qualified enough. Despite the fact that "Secondary Education" is among the top ten most desired professions, a smaller percentage falls on natural sciences, which, as a result, also reduces the number of teachers of relevant subjects. In rural schools, it is destructive when a biology teacher also teaches chemistry, and a history teacher tutors geography. Such a collapse is observed precisely due to the lack of specialists, and the children must at least be given the educational material by someone. Due to insufficient qualifications, a person cannot even simply interest a child, makes a negative impression about science in

general. Such prejudices can haunt a person for life. Partially, the choice of a future teacher of physics, chemistry, or mathematics is also influenced by the low salary.

At the moment, these problems are being tried to be resolved by agreements on cooperation between schools and individual faculties, by increasing the number of career guidance speeches with presentations of colorful and interesting experiments.

This work in no way encourages to completely ignore all sciences, except natural ones, because the world is a single mechanism, in which each gear rotates continuously and performs its work in a clearly assigned place. If you remove one of them, the mechanism may stop. So, a person who was once taught in school is reading an article published by a journalist on an informatively arranged website by a designer and programmer from their smartphone, which has a lithium-ion battery invented by a chemist and adapted specifically for this mobile device by an engineer, while simultaneously drinking coffee, brewed by a barista and listening to music performed by a chamber ensemble and written by Mozart.