

1. In the national industrial development strategy, Vietnam wants to develop industrial human resources through restructuring, renewing, and improving training institutions' quality. Is the current Vietnamese higher education system suitable for the industrial human resource development goal? What problems are Vietnam higher education system/model having?

As in other countries, the higher education system in Vietnam is organized in a traditional way that is not well suited to current needs. For example, interdisciplinary collaboration is difficult because of the organizational structure. Also, some of the training of students is narrowly focused or out of date. There is not adequate attention paid to students' critical thinking skills, which are necessary to develop new ideas. These are problems in universities worldwide, so it is not surprising that Vietnam also has these problems.

2. How can Vietnam reform and restructure its education system to develop industrial human resources? What can the Vietnamese government do?

Vietnam should build upon its strengths. First, the Vietnamese people have traditionally prioritized education and shown great respect for teachers. There is universal agreement in Vietnam about the importance of higher education. Second, as a socialist-oriented country, Vietnam can think in long-range terms without the extreme pressures from the private sector to prioritize the short range. This was clear in the dramatic contrast between Vietnam's handling of the COVID-19 pandemic – in which the public and the political leaders came together to make short-term sacrifices to save lives and emerge from the pandemic as a strong and united country – and the U.S. handling of the pandemic, which was a catastrophic failure.

One suggestion is for Vietnam to develop strong Masters programs at all major universities, with government support for students at that level. Such programs give university graduates additional qualifications for jobs in the high-technology sector, as well as putting them in a strong position to compete for admission to PhD programs in Western countries. In addition, such programs help reduce the “brain drain”, because students who go abroad after spending additional years in Vietnam after university graduation are older and are more likely to return to Vietnam than students who leave Vietnam immediately after graduation.

Another suggestion is for universities to give priority to certain “soft skills” that are badly needed in industry. The most important soft skill is the ability to communicate effectively in speech and writing, both in Vietnamese and English. This includes the ability to articulate the advantages and disadvantages of proposed new ideas in a clear and logical manner.

A third suggestion is for the government and universities to increase the proportion of women studying at the advanced level. A country cannot expect to realize its full potential in industrial development unless women play a role equal to that of men.

A fourth suggestion is for universities to prioritize areas of science and high-tech that are most important for humanity, such as medical research, alternative energy sources, and sustainability under climate change. Other socialist-oriented countries have had successful accomplishments in these areas. For example, China is the world leader in solar panel technology, and Cuba is the only relatively poor country that independently developed a COVID-19 vaccine.

3. In the context of the 4.0 industrial revolution, what changes does Vietnam's higher education system need so that Vietnam can realize its industrial development strategy?

Universities are uniquely situated to study the human impact of new technology. Faculty and graduate students in the sciences can work collaboratively with colleagues in non-scientific fields who are often better able to assess human impact. They can also collaborate with organizations such as the Vietnam Women's Union, which works to mitigate damage to women from economic and technological changes. Historically, in many parts of the world this has been neglected. For example, the so-called "green revolution" was implemented in various countries in ways that created greater inequality and were especially damaging to women. A more recent example of an overly technological approach is the development of automated COVID-19 contact-tracing apps for smartphones. Studies by university researchers in the U.S. have shown that they cause much more damage through "false positives" for poor people than for wealthy people. As in earlier industrial revolutions, automation can cause great economic dislocation and hardship for large sections of the population. University researchers can study this problem and help guide policy decisions designed to prevent this.